Chapter 4 – California Environmental Quality Act Evaluation

4.1 Determining Significance under CEQA

The proposed project is a joint project by Caltrans and FHWA and is subject to State and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both CEQA and NEPA. Caltrans is the lead agency under CEQA and the FHWA is the lead agency under NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or some lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require Caltrans to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of mandatory findings of significance, which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

4.2 Less than Significant Effects of the Proposed Project

The following impacts would have a less than significant effect on the environment based on implementation of design measures and/or routine monitoring efforts during construction:

- Air Quality
- Energy
- Farmlands/Agricultural Lands
- Floodplains
- Geology and Soils
- Growth

- Hydrology and Water Quality
- Land Use
- Parks and Recreational Facilities
- Pedestrian and Bicvcle
- Traffic and Transportation
- Utilities and Emergency Services

For a full discussion of environmental consequences for the above issues, please see related sections in *Chapter 3*.



4.3 Less than Significant Impacts with Mitigation and/or Minimization

The following resources have specific mitigation and/or minimization measures to reduce or avoid impacts that could occur during construction (cultural and paleontological resources, and hazardous materials) or operations (noise). These measures would reduce potential impacts to less than significant levels under CEQA, as described below.

4.3.1 Cultural Resources

As detailed in *Section 3.8, Cultural Resources*, no substantial change to any historical resource would occur. There is a potential for currently unknown sites to be located during project construction. If unanticipated discoveries are made, consultation with the SHPO would occur, as appropriate. This coordination, combined with implementation of proposed mitigation and minimization measures identified in *Section 3.8* of this Final EIR/EIS, ensures that there would not be significant cultural resources impacts to historical resources.

4.3.2 Paleontological Resources

As detailed in *Section 3.11, Paleontology*, direct impacts to paleontological resources could occur when mass grading cuts extend into geological deposits containing fossils. Although the precise types, depths, and locations of various construction activities are not known at this time, unearthing of paleontological resources is anticipated.

If anticipated discoveries occur, implementation of proposed mitigation measures identified in *Section 3.11* of this Final EIR/EIS would reduce paleontological resources impacts to less than significant levels.

4.3.3 Hazards and Hazardous Materials

As detailed in Section 3.13, Hazardous Waste/Materials, construction of the proposed project has the potential to disturb soils and other materials containing hazardous materials, such as aerially deposited lead, petroleum hydrocarbons, pesticides, herbicides, and other contamination due to historic uses in and around the project areas.

Wherever possible, the *I-5 NCC Project* would use the existing I-5 alignment to avoid and/or minimize impacts from hazards and hazardous materials. Where avoidance is not possible, the project incorporates measures to avoid potential disturbances of contamination areas, as described in *Section 3.13* of this Final EIR/EIS. Compliance with the applicable regulations pertaining to the safe handling and removal of hazardous waste/materials would reduce impacts pertaining to emission and handling of hazardous waste/materials within one quarter-mile of a school to less than significant levels.



4.3.4 Noise

Determination for noise impact under CEQA is based on a comparison between the existing noise levels and the build noise levels without soundwalls, as identified in *Section 3.15*, *Noise*. CEQA differs from NEPA in the assessment of the noise. Under CEQA, the assessment entails looking at the setting of the noise impact and then how large or perceptible a noise increase would be in the given area under future build and no-build conditions.

For the purposes of *Section 4.3.4* and *Section 3.15*, a Noise Sensitive Area (NSA)/Receptor Site is an area involving regular human use or activities that would be susceptible to adverse impacts due to highway traffic-generated noise. NSAs typically include residences, churches, schools, parklands, or hospitals, and may include individual sites, groups of sites, or an entire community. Individual analysis sites within the NSA are called Noise Receptor Sites. For the purposes of analysis, a single-family residence (SFR), multi-family residence (MFR), mobile home (MH), school (SCH), hotel or motel (HM), office, church (CHR), and recreational area (REC), are development types that are identified as units. Several units may be represented by a receptor.

A significant environmental effect under CEQA generally is defined as a substantial or potentially substantial adverse change in the physical environment. The increase in traffic noise caused by a project is the primary factor considered by Caltrans in assessing the significance of noise impacts under CEQA. Key considerations when determining a significant traffic noise impact under CEQA include whether there is an increase between existing and projected noise levels, the uniqueness of the setting, the sensitive nature of the noise receptors, the magnitude of the noise increase, the number of noise receptors affected, and the absolute noise level. The CEQA noise analysis is different from, but related to, the NEPA 23 CFR 772 analysis discussed in *Chapter 3*, which is centered on noise abatement criteria. Although the conclusions may vary, the decibel data addressed in this chapter are the same as those addressed in *Chapter 3*, and remain the same as those disclosed in the Draft EIR/EIS.

The Noise Study Report assesses the potential noise impacts associated with the I-5 NCC Project. Noise impacts are presented in Section 3.15, where tables for each segment show the existing traffic noise levels and predicted noise levels for all alternatives, including the future no-build. L_{eq} is used per the Caltrans' Traffic Noise Analysis guidance and is the equivalent steady-state sound level, which in a stated period of time contains the same acoustic energy as the time-varying sound level.

The noise measurement sites, or representative noise receptors, are locations where noise measurements are taken in order to determine existing noise levels and to verify or calibrate computer noise models. Locations that are expected to receive the greatest noise impacts, such as the first row of houses from the noise source, are generally chosen. These sites are chosen as being representative of similar sensitive sites in the area. Noise measurements were conducted in frequent outdoor human-use areas and indoor classroom locations. All noise measurement sites were selected so that there would be no unusual noises from sources such as dogs, pool pumps, or children that could affect the measured noise levels. To the extent feasible, sites that were free of major obstructions or noise contamination were selected.



The proposed build alternatives would increase noise levels between 1 dBA and 5 dBA from existing conditions in most locations of the I-5 North Coast Corridor by 2030,¹ with some areas potentially experiencing an increase as high as a 12 dBA change. Changes of 3 dBA or less are generally not detectable by the average healthy human ear and the difference in noise would not be expected to be perceptible. Changes of 5 dBA, however, are readily perceptible. The relationship between noise level change and perceived change is summarized as follows, based on the Caltrans Technical Noise Supplement (November 2009).

• 0 − 3 dBA change: Barely perceptible

5 dBA change: Readily perceptible

10 dBA change: Twice as loud

The recommended soundwalls in *Section 3.15* would not mitigate the noise impact to a level below CEQA significance for each individual soundwall.

The noise receptors identified along the *I-5 NCC Project* have been divided into 22 segments; information discussing noise impacts along these segments is provided below.

Segment 1 (La Jolla Village Drive to Genesee Avenue) – The 13 units, located within an existing, noisy and urban environment along this segment of the I-5 corridor, are represented by seven noise receptors. Based on the build alternatives (without a soundwall), noise receptors at Segment 1 would experience a projected noise level increase between 3 dBA and 4 dBA. A 3 dBA increase is barely perceptible to the human ear. A 4 dBA increase is perceptible to the human ear. Only two of the seven noise receptors within this segment would experience a projected noise level increase of 4 dBA with the build alternatives. The remaining five noise receptors would experience a projected noise level increase of only 3 dBA. The increase between existing noise levels and the build alternatives would not result in a significant noise impact under CEQA and no mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 1 are currently loud and would remain loud.

<u>Segment 2 (Genesee Avenue to Carmel Mountain Road)</u> – There are five noise receptors, which represent 30 units, located within this segment of the I-5 corridor. This segment is an existing, noisy and urban environment. Based on the build alternatives (without a soundwall), noise receptors at Segment 2 would experience a projected noise level increase of between 1 dBA and 2 dBA. This range of a 1 to 2 dBA increase between existing noise levels and the build alternative is barely perceptible to the human ear. Therefore, under CEQA, no significant noise impact would occur as a result of the project and no mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 2 are currently loud and would remain loud,

<u>Segment 3 (Carmel Mountain Road to Carmel Valley Road)</u> – There are 16 noise receptors, which represent 47 units, located within this segment of the I-5 corridor. This segment consists of an existing, dense residential environment. Based on the build alternatives (without a soundwall), noise receptors at Segment 3 would experience a projected noise level increase between 1 and 4 dBA. A 3 dBA increase is barely perceptible to the human ear. A 4 dBA increase is perceptible to the human ear. One noise receptor (R3.10A, representing three units) would experience a noise reduction of 2 dBA. Only 4 of the 16 noise receptors would

_

¹ The Noise Study uses year 2030, but the traffic discussion in *Section 3.6* clarified that the use of 2030 traffic analysis is equally relevant through 2042 based on the Series 10, 11 and 12 analysis; that is the basis for determining the traffic volume for the noise level.



experience a projected noise level increase of 4 dBA; therefore, most of the noise receptors (11 of 16) would experience a projected noise level increase of 1 dBA to 3 dBA. This range of a 1 to 3 dBA increase between existing noise levels and the build alternative would be barely perceptible to the human ear. A 4 dBA increase is perceptible to the human ear. Under CEQA, no significant noise impact would occur as a result of the project and no mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 3 are currently loud and would remain loud.

<u>Segment 4 (Carmel Valley Road to Del Mar Heights Road)</u> – There are 25 noise receptors, which represent 111 units, located within this segment of the I-5 corridor. This segment is an existing, noisy, dense residential environment. Based on the build alternatives (without a soundwall), noise receptors at Segment 4 would experience a projected noise level increase between 0 dBA and 3 dBA. A 3 dBA increase is barely perceptible to the human ear. A 4 dBA increase is perceptible to the human ear. One noise receptor (R4.9, representing four units) would experience a noise reduction of 1 dBA. The increase between existing noise levels and the build alternatives would not result in a significant noise impact under CEQA and no mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 4 are currently loud and would remain loud.

Segment 5 (Del Mar Heights Road to Via de la Valle Undercrossing) – The 135 units along this segment of the I-5 corridor, represented by 29 noise receptors, are located within an existing noisy, and primarily residential and urban environment. Based on the build alternatives (without a soundwall), noise receptors at Segment 5 would experience a projected noise level increase between 0 dBA and 6 dBA. However, only one of the noise receptors (R5.14, with two represented units) would experience a projected noise level increase of 6 dBA. The projected future noise level at this receptor is 68 dBA, which is consistent with other noise receptors in the vicinity. The other 28 noise receptors would experience a projected noise level increase between 0 dBA and 5 dBA. This range between existing noise levels and the build alternative would be between barely perceptible to readily perceptible to the human ear. Therefore, under CEQA, no significant noise impact would occur as a result of the project and no mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 5 are currently loud and would remain loud.

Segment 6 (Via de la Valle Undercrossing to Lomas Santa Fe Drive) - The 135 units, represented by 34 noise receptors, are located within an existing noisy, residential and urban environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 6 would experience a projected noise level increase between 0 dBA and 10 dBA. However, only one noise receptor would experience a projected noise level increase of 10 dBA (R6.5, with one represented unit); one noise receptor would experience a projected noise level increase of 9 dBA (R6.4, with six represented units); one noise receptor would experience a projected noise level increase of 8 dBA (R6.6, with five represented units); and one noise receptor would experience a projected noise level increase of 7 dBA (R6.7, with five represented units). These receptors, representing 17 units, would perceive noise increases that are considered above readily perceptible to two times as loud as the current condition. Receptors R6.6 and R6.7 would experience a potentially significant impact under CEQA due to the combination of: the location of these receptors; the adjacent receptors noise levels; the number of units represented; the resulting potential absolute noise level between 69 and 71 dBA; and a 7 to 8 dBA projected noise level increase. There are no soundwalls planned for these receptors due to the retention of the coastal view. A soundwall (S603A) is planned for the potentially significant impact to these noise receptors R6.4 and



R6.5 due to the combination of: the location of these receptors; the adjacent receptors noise levels; number of units represented; the resulting potential absolute noise level between 69 and 80 dBA; and a 7 to 10 dBA projected noise level increase. One noise receptor (R6.11, representing seven frontage units) would experience a noise reduction of 1 dBA. The remaining 29 receptors, representing 111 units, would experience a noise increase change between 0 and 6 dBA. Three noise receptors would experience a projected noise level increase of 6 dBA (R6.9A, with four represented units; R6.21, with three represented units; and R6.23, representing a school). The remaining 26 noise receptors, representing 103 units, would experience a projected noise level increase between 0 dBA and 5 dBA. This range of a 0 dBA to 5 dBA increase between existing noise levels and the build alternative would be barely perceptible to readily perceptible to the human ear.

The noise receptors where sound levels would increase by between 6 and 9 dBA would experience a difference that is readily perceptible, but less than twice as loud. The resulting absolute noise level would be consistent with the other noise receptors and the general noisy conditions along this segment of the I-5 North Coast Corridor. For this segment overall, under CEQA, no significant noise impact would occur as a result of the project after the proposed mitigation and no additional mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 6 are currently loud and would remain loud.

Segment 7 (Lomas Santa Fe Drive to Manchester Avenue) – The 67 units, represented by 33 noise receptors, are located within an existing, noisy, and urban environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 7 would experience a projected noise level increase between 0 dBA and 4 dBA. A 3 dBA increase is barely perceptible to the human ear. A 4 dBA increase is perceptible to the human ear. Only 2 of the 33 noise receptors would experience a projected noise level increase of 4 dBA; therefore, the vast majority of the noise receptors (31 of 33) would experience a noise increase of 0 dBA to 3 dBA. The increase between existing noise levels and the build alternatives would not result in a significant noise impact under CEQA. The build alternatives would not significantly contribute to the existing noise levels. Therefore, under CEQA, no significant noise impact would occur as a result of the project and no mitigation is required.

Segment 8 (Manchester Drive to Birmingham Drive) - The 152 units, represented by 32 noise receptors, are located within an existing, noisy, urban, and residential environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 8 would experience a projected noise level increase between 0 and 11 dBA. The 11 dBA projected noise level increase at one noise receptor (R8.7, representing four units) is unique in this segment with a projected noise increase considered over two times as loud as existing noise levels. A soundwall (S635) is planned for the potentially significant impact of noise receptor R8.7 due to the combination of: the location of this receptor; the adjacent receptors noise levels; the number of units represented; and an 11 dBA projected noise level increase. One noise receptor (R8.19, representing six units) would experience a noise reduction of two dBA. The other 30 noise receptors (representing 142 units) would experience a projected noise level increase between 0 dBA and 6 dBA (only 3 noise receptors increasing at 6 dBA: R8.1, R8.5, and R8.6, representing 4, 12, and 8 units respectively). Seven of these 22 noise receptors would experience a projected noise level increase of 0 dBA. Most of the noise receptors (28 of 32) would experience a projected noise level increase of 0 dBA to 4 dBA. A 3 dBA increase is barely perceptible to the human ear. A 4 dBA increase is perceptible to the human ear.



The resulting absolute noise level would be consistent with the other noise receptors and the general noisy conditions along this segment of the I-5 North Coast Corridor. For this segment overall, under CEQA, a less than significant noise impact would occur as a result of the project after the proposed mitigation and no additional mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 8 are currently loud and would remain loud.

Segment 9 (Birmingham Drive to Santa Fe Drive) - The 67 units, represented by 19 noise receptors, are located within an existing, noisy, urban, and residential environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 9 would experience a projected noise level increase between 2 dBA and 10 dBA. Ten of the 19 noise receptors would experience a projected noise level increase of One noise receptor (R9.14, representing six units) would experience a 5 dBA or less. substantial projected noise level increase of 10 dBA. A 10 dBA increase is considered two times as loud as the existing noise level. In the context of its baseline setting, however, R9.14 would change from a slightly noisy level (57 dBA) to a noisy level (67 dBA) in an overall corridor that is already noisy. Other noise receptors (R9.2, R9.3, R9.4, R9.4A, R9.15, and R9.15A; representing a total of 28 units) would experience an increase of between 7 to 9 dBA, which would be a readily perceptible increase, but less than two times as loud to the human There are no soundwalls planned for these receptors due to the economic cost of building a soundwall that would cause a perceptible noise reduction. These receptors would experience a potentially significant impact under CEQA due to the combination of: the location of these receptors: the adjacent receptors noise levels: the number of units represented: the resulting potential absolute noise level between 66 and 77 dBA; and a 7 to 10 dBA projected noise level increase. The remaining eight receptors, representing 28 units, are expected to experience a projected noise level increase of 2 dBA to 6 dBA, which is barely perceptible to above readily perceptible to the human ear.

The resulting absolute noise level at the noise receptors that would experience a projected noise level increase of 7 to 10 dBA, would be consistent with the other noise receptors and the general noisy conditions along this segment of the I-5 North Coast Corridor. For this segment overall, under CEQA, a potentially significant noise impact may occur at noise receptors R9.2, R9.3, R9.4, R9.4A, R9.14, R9.15, and R9.15A as a result of the project. Noise levels along Segment 9 are currently loud and would remain loud.

Segment 10 (Santa Fe Drive to Encinitas Boulevard) - The 86 units, represented by 24 noise receptors, are located within an existing dense, residential environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 10 would experience a projected noise level increase between 0 and 8 dBA. The 8 dBA increase at 1 noise receptor (R10.6, representing 10 units) is unique, because the other 23 noise receptors (representing 76 units) would experience a projected noise level increase between 0 dBA and 5 dBA. The receptor representing 10 units would perceive noise increases that are considered between readily perceptible and two times as loud to the human ear. This is a potentially significant impact at noise receptor R10.6 due to the combination of: the location of these receptors; the adjacent receptors noise levels; the number of units represented; the resulting potential absolute noise level between 76 dBA; and an 8 dBA projected noise level increase. There are no soundwalls planned for receptor R10.6 due to the economic cost of the soundwall when compared to the benefit received by the represented units. The remaining 23 receptors, representing 76 units, would experience a noise increase change between 0 and 5 dBA. This range of a 0 dBA to 5 dBA increase between existing noise levels and the build alternative would be barely perceptible to readily perceptible to the human ear.



The resulting absolute noise level would be consistent with the other noise receptors and the general noisy conditions along this segment of the I-5 North Coast Corridor. For this segment overall, under CEQA, no significant noise impact would occur as a result of the project and no mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 10 are currently loud and would remain loud.

Segment 11 (Encinitas Boulevard to Leucadia Boulevard) - The 132 units, represented by 40 noise receptors, are located within an existing urban, and primarily residential, environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 11 would experience a projected noise level increase between 1 and 7 dBA. However, only one noise receptor (R11.27, representing two units), would experience the projected noise level increase of 7 dBA. A 7 dBA increase is considered between readily perceptible and two times as loud to the human ear. This receptor, representing two units, would perceive noise increases that are considered above readily perceptible to two times as loud. A soundwall (S686A) is planned for the potentially significant impact of this noise receptor (R11.27) due to the combination of: the location of these receptors; the adjacent receptors' noise levels; the number of units represented; the resulting potential absolute noise level of 77 dBA; and a 7 dBA projected noise level increase. The remaining 39 receptors, representing 130 units, would experience a noise increase change between 0 and 6 dBA. Three noise receptors would experience a projected noise level increase of 6 dBA (R11.29, R11.31, and R11.32, representing one, three, and two units, respectively). A 6 dBA increase is considered readily perceptible increase to the human ear. All other 36 noise receptors would experience a projected noise level increase between 0 dBA and 5 dBA. The range of 5 dBA to 6 dBA increase between existing noise levels and the build alternative is readily perceptible to the human ear. The range of a 0 dBA to 3 dBA increase between existing noise levels and the build alternative would be barely perceptible to the human ear.

For the noise receptor that would experience a projected noise level increase of 7 dBA, the resulting absolute noise level would be consistent with the other noise receptors and the general noisy conditions along this segment of the I-5 North Coast Corridor. For the segment overall, under CEQA, mitigation is being incorporated into the project to lessen the environmental impacts and no significant noise impact would occur as a result of the project and no additional mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 11 are currently loud and would remain loud.

Segment 12 (Leucadia Boulevard to La Costa Avenue) – The 104 units, represented by 52 noise receptors, are located within an existing urban, and primarily residential, environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 12 would experience a projected noise level increase between 1 dBA and 6 dBA. However, only three noise receptors would experience a projected noise level increase of 6 dBA (R12.34, R12.46, and R12.48, representing one, three, and one units, respectively) and nine noise receptors would experience a projected noise level increase of 5 dBA. A 5 to 6 dBA increase is considered readily perceptible increase to the human ear. One noise receptor (R12.40, representing two units) would experience a noise reduction of 1 dBA. All other 39 noise receptors (representing 97 units) would experience a projected noise level increase between 0 dBA and 4 dBA. A 3 dBA increase is barely perceptible to the human ear. A 4 dBA increase is perceptible to the human ear. Under CEQA, no significant noise impact would occur as a result of the project and no mitigation is required. The build



alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 12 are currently loud and would remain loud.

Segment 13 (La Costa Avenue to Poinsettia Lane) - The 161 units, represented by 30 noise receptors, are located within an existing dense, and primarily residential, environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 13 would experience a projected noise level increase between 1 dBA and 7 dBA. However, the 7 dBA increase at 1 noise receptor (R13.8, representing four units) is unique, because the other 29 noise receptors would experience a projected noise level increase between 1 dBA and 5 dBA. Receptor R13.8 would perceive noise increases that are considered between readily perceptible and two times as loud. A soundwall is not planned for the potentially significant impact of noise receptor R13.8. In the context of its baseline setting, R13.8 would change from an urban quiet level (51 dBA) to a slightly noisy level (61 dBA) in an overall corridor that is already noisy. However, receptor R13.8 is potentially significant under CEQA due to the combination of: the location of these receptors; the adjacent receptors' noise levels; the number of units represented; and a 7 dBA projected noise level increase. One noise receptor (R13.20, representing one unit) would experience a noise reduction of 1 dBA. The remaining 28 receptors, representing 96 units, would experience a noise increase between 0 and 6 dBA. This range of a 1 dBA to 6 dBA increase between existing noise levels and the build alternatives would be between barely perceptible and readily perceptible to the human ear.

The resulting absolute noise level would be consistent with the other noise receptors and the general noisy conditions along this segment of the I-5 North Coast Corridor. For the segment overall, under CEQA, no significant noise impact would occur as a result of the project and no additional mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 13 are currently loud and would remain loud.

Segment 14 (Poinsettia Lane to Palomar Airport Road) - The 170 units, represented by 31 noise receptors, are located within an existing dense, and primarily residential, environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 14 would experience a projected noise level increase between 1 dBA and 8 dBA. However, the 8 dBA increase at 1 noise receptor (R14.6 representing 16 units) is unique, because the other 30 noise receptors would experience a projected noise level increase between 1 dBA and 4 dBA. An 8 dBA increase is considered between a readily perceptible increase and two times as loud to the human ear. A soundwall is not planned for the potentially significant impact of this noise receptor R14.6 due to the economic cost of building a soundwall that would cause a perceptible reduction. Receptor R14.6 is potentially significant under CEQA due to the combination of: the location of these receptors; the adjacent receptors noise levels; the number of units represented; and an 8 dBA projected noise level increase. The remaining 30 receptors representing 154 units would experience a noise increase change between 0 and 6 dBA. This range of a 1 dBA to 3 dBA increase between existing noise levels and the build alternative would be barely perceptible to the human ear. The range from 4 dBA to 6 dBA is readily perceptible to the human ear.

The resulting absolute noise level would be consistent with the other noise receptors and the general noisy conditions along this segment of the I-5 North Coast Corridor. For the segment overall, under CEQA, no significant noise impact would occur as a result of the project and no additional mitigation is required. The build alternatives would not significantly contribute to the



existing noise levels. Noise levels along Segment 14 are currently loud and would remain loud.

<u>Segment 15 (Palomar Airport Road to Cannon Road)</u> – The two units, represented by two noise receptors (R15.1 and R15.2), are located north of Cannon Road and within an existing noisy, urban environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 15 would experience a projected noise level increase between 2 dBA and 3 dBA. This range of a 2 dBA to 3 dBA increase between existing noise levels and the build alternative would be barely perceptible to the human ear. Therefore, under CEQA, no significant noise impact would occur as a result of the project and no mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 15 are currently loud and would remain loud.

Segment 16 (Cannon Road to Tamarack Avenue) – The 82 units, represented by 21 noise receptors, are located within an existing noisy, and primarily residential and urban environment, along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 16 would experience a projected noise level increase between 1 dBA and 5 dBA. However, only one of the noise receptors (R16.1, representing three units) would experience the projected noise level increase of 5 dBA. Twenty noise receptors would experience a projected noise level increase between 1 dBA and 4 dBA. A 3 dBA increase is barely perceptible to the human ear. A 4 dBA increase is perceptible to the human ear. Therefore, under CEQA, no significant noise impact would occur as a result of the project and no mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 16 are currently loud and would remain loud.

Segment 17 (Tamarack Avenue to Carlsbad Village Drive) - The 195 units, represented by 35 noise receptors, are located within an existing dense, urban, and primarily residential environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 17 would experience a projected noise level increase between 1 dBA and 7 dBA. Two noise receptors (R17.11 and R17.13, representing 10 and 1 units, respectively) would experience a projected noise increase of 7 dBA, to levels consistent with the loudness of the corridor. Receptors R17.11 would perceive noise increases that are considered above readily perceptible. A soundwall (S603) is planned for the potentially significant impact of this noise receptor due to the combination of: the location of these receptors; the adjacent receptors' noise levels; the number of units represented; the resulting potential absolute noise level between 71 dBA; and a 7 dBA projected noise level increase. One noise receptor (R17.19, representing 21 units) would experience a noise reduction of 1 dBA. The remaining 29 receptors (representing 97 units) would experience a noise increase between 0 and 6 dBA. Four noise receptors would experience an increase of 6 dBA (R17.12, R17.14, R17.15 and R17.16, representing four, one, one, and one units, respectively). A 6 dBA increase is considered a readily perceptible increase. A soundwall (S810) is, however, planned for noise receptor R17.12 (Holiday Park) due to the combination of uniqueness of the outdoor recreational use, resulting potential absolute noise level of 72 dBA, and a 6 dBA projected noise level increase. All other 29 noise receptors (representing 177) units would experience a projected noise level increase between 1 dBA and 5 dBA. This range of a 1 dBA to 5 dBA increase between existing noise levels and the build alternative would range from barely perceptible to readily perceptible to the human ear.



For noise receptors that would experience a projected noise level increase of six dBA, the noise level increase would be over readily perceptible. However, the resulting absolute noise level would be consistent with the other noise receptors and the general noisy conditions along this segment of the I-5 North Coast Corridor. Under CEQA and for the segment overall, other than the mitigation requirement to construct a soundwall (S810) for noise receptors R17.11 through R17.13, no significant noise impact would occur as a result of the project and no additional mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 17 are currently loud and would remain loud.

Segment 18 (Carlsbad Village Drive to Vista Way [SR-78]) – The 95 units, represented by 30 noise receptors, are located within an existing urban, and primarily residential, environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 18 would experience a projected noise level increase between 2 dBA and 12 dBA. One receptor (R18.22, representing three units) would experience an increase of 12 dBA. Receptor R18.22 would experience a potentially significant impact under CEQA. This potentially significant impact is based on the location, magnitude of noise increase of 12 dBA, and a predicted absolute noise level of 82 dBA. A 12 dBA increase is perceived over two times as loud to the human ear. A 14-ft-high soundwall (S821) is planned for this noise receptor (residence located at 1148 Knowles Avenue in Carlsbad) to mitigate the potential noise impacts at this noise receptor.

There are two receptors that would experience an increase of nine dBA (R18.7, representing one unit, and R18.8, representing six units). A 9 dBA increase is perceived as almost two times as loud to the human ear. There are five receptors that would experience an increase of 8 dBA: R18.2, representing five units; R18.11, representing one unit; R18.19, representing two units; R18.20, representing one unit; and R18.24, representing one unit. There are 13 receptors that would experience an increase of 7 dBA: R18.1, representing 3 units; R18.1A, representing 1 unit; R18.2, representing 5 units; R18.3, representing 8 units; R18.4, representing 1 unit; R18.5, representing 1 unit; R18.6, representing 1 unit; R18.7, representing 1 unit; R18.7, representing 1 unit; R18.9, representing 1 unit; R18.5, representing 34 units; and R18.27, representing 1 unit. A 7 and 8 dBA increase is considered between a readily perceptible increase and two times as loud to the human ear. The remaining 9 receptors, representing 16 units, would experience a noise increase change between 0 and 6 dBA.

There is no soundwall planned for receptor R18.1 due to the economic cost of the soundwall when compared to the benefit received by the represented units. Receptor 18.1, representing three units, is potentially significant under CEQA due to the combination of: the location of these receptors; the adjacent receptors noise levels; the number of units represented; the resulting potential absolute noise level of 73 dBA; and a 7 dBA projected noise level increase. A soundwall is not planned for the potentially significant impact at noise receptors R18.8, R18.9, and R18.27 due to the economic cost of building a soundwall that would cause a perceptible reduction. Receptors R18.8, and R18.9 are potentially significant under CEQA due to the combination of: the location of these receptors; the adjacent receptors noise levels; number of units represented; and a 7 dBA projected noise level increase.

Soundwalls (S821, S822, S826, and S827) are planned for the potentially significant impact for noise receptors R18.1A, R18.2, R18.2A, R18.3, R18.4, R18.5, R18.6, R18.7, R18.7A, R18.8, R18.9, R18.11, R18.17, R18.18, R18.19, R18.20, R18.22, R18.24, R18.25, and R18.27 due to



the combination of: the location of these receptors; the adjacent receptors noise levels; the number of units represented; the resulting potential absolute noise level between 65 and 82 dBA; and a 7 to 12 dBA projected noise level increase.

For this segment overall, under CEQA, a potentially significant noise impact may occur for these noise receptors as a result of the project. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 18 are currently loud and would remain loud.

<u>Segment 19 (Vista Way [SR-78] to Oceanside Boulevard)</u> – The 178 units, represented by 54 noise receptors, are located within an existing urban, and primarily residential, environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 19 would experience a projected noise level increase between 0 dBA and 9 dBA. An existing soundwall at varying heights at three noise receptors (R19.6A, R19.7, and R19.8, representing 12 units) would be partially removed and replaced with a new soundwall as a project feature at these noise receptors.

One noise receptor (R19.44, representing 3 units) would experience a projected noise level increase of 9 dBA; 6 noise receptors would experience a projected noise level increase of 8 dBA (R19.7 with 5 units, R19.8 with 4 units, R19.15 with 5 units, R19.26 with 4 units, R19.27 with 8 units, and R19.43 with 2 units); and 10 noise receptors would experience a projected noise level increase of 7 dBA (R19.1 with 1 unit, R19.2 with 1 unit, R19.12 with 2 units, R19.13 with 1 unit, R19.14 with 3 units, R19.25 with 1 unit, R19.28 with 2 units, R19.35 with 4 units, R19.36 with 1 unit, and R19.45 with 6 units). A 9 dBA increase is considered to be almost two times as loud to the human ear; while 7 and 8 dBA increases are considered between readily perceptible and two times as loud to the human ear. These 17 receptors (representing 53 units) would perceive noise increases that are considered above readily perceptible to two times as loud.

The remaining 37 receptors (representing 125 units) would experience a noise change between less than 0 and 6 dBA. One noise receptor (R19.37, representing five units) would experience a noise reduction of 3 dBA. Two noise receptors (R19.49 and R19.50, representing one unit each) would experience a noise reduction of 2 dBA. Three noise receptors would experience a projected noise level increase of six dBA (R19.30, R19.39, and R19.40, representing three, three, and two units, respectively). A six dBA increase is considered a readily perceptible increase. Although these increases may be perceptible, this is a noisy corridor that would remain noisy. Thirty-four noise receptors along Segment 19 would experience a projected noise level increase between 1 dBA and 5 dBA, and this range of increase between existing noise levels and the build alternative would be between barely perceptible and readily perceptible to the human ear.

Soundwalls (S841, S835, S836, S845, and S846) are planned for the potentially significant impact to these noise receptors R19.1, R19.2, R19.12, R19.13, R19.14, R19.15, R19.25, R19.26, R19.27, R19.28, R19.35, R19.36, R19.43, R19.44, and R19.45; due to the combination of: the location of these receptors; the adjacent receptors noise levels; the number of units represented; the resulting potential absolute noise level between 75 and 82 dBA; and a 7 to 9 dBA projected noise level increase.

There are no soundwalls planned for R19.7 and R19.8 due to the economic cost of the soundwall when compared to the benefit received by the represented units. However the



existing soundwall would be replaced for these receptors. Receptors 19.7and 19.8 are potentially significant under CEQA due to the combination of: the location of these receptors; the adjacent receptors noise levels; the number of units represented; the resulting potential absolute noise level between 74 and 75 dBA; and an 8 dBA projected noise level increase.

The resulting absolute noise level would be consistent with the other noise receptors and the general noisy conditions along this segment of the I-5 North Coast Corridor. For this segment overall, under CEQA, no significant noise impact would occur for these noise receptors as a result of the project and no additional mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 19 are currently loud and would remain loud.

Segment 20 (Oceanside Boulevard to Mission Avenue) - The 123 units, represented by 27 noise receptors, are located within an existing urban environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 20 would experience a projected noise level increase between 0 dBA and 8 dBA. An 8 dBA increase is considered to be between a readily perceptible increase and two times as loud to the human ear. However, only one noise receptor (R20.2, representing three units at Ron Ortega Recreation Park) would experience a potentially significant impact under CEQA. Because of the uniqueness of recreational use, a projected noise level increase of 8 dBA, and resulting potential absolute noise level of 77 dBA, a soundwall (S862) would be constructed at Ron Ortega Recreation Park. One noise receptor (R20.4, representing one unit) would experience a noise reduction of 3 dBA. Another noise receptor (R20.26, representing one unit) would experience a noise reduction of 6 dBA. The remaining 25 noise receptors, representing 119 units, would experience a projected noise level increase between 0 dBA and 4 dBA. This range of a decreasing noise level to a four dBA increase between existing noise levels and the build alternative would be barely perceptible to readily perceptible to the human ear.

The resulting absolute noise level would be consistent with the other noise receptors and the general noisy conditions along this segment of the I-5 North Coast Corridor. Therefore, under CEQA, no significant noise impact would occur as a result of the project and no additional mitigation is required for these 27 noise receptors. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 20 are currently loud and would remain loud.

Segment 21 (Mission Avenue to SR-76) – The 60 units, represented by 21 noise receptors, are located within an existing developed and urban environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 21 would experience a projected noise level increase between 1 dBA and 6 dBA, and a noise reduction of 4 dBA at receptor R21.5, representing 2 units. Only 1 of the 21 noise receptors would experience a projected noise level increase of 6 dBA (R21.39, representing one unit). This 6 dBA increase between existing noise levels and the build alternative would be readily perceptible to the human ear. The remaining 19 noise receptors, representing 118 units, would experience a projected noise level increase between 1 dBA and 5 dBA, which is barely perceptible to readily perceptible to the human ear. Therefore, under CEQA, no significant noise impact would occur as a result of the project and no mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 21 are currently loud and would remain loud.



<u>Segment 22 (SR-76 to Wire Mountain Road)</u> – The 54 units, represented by 15 noise receptors, are located within an existing noisy, urban and primarily residential environment along this segment of the I-5 corridor. Based on the build alternatives (without a soundwall), noise receptors at Segment 22 would experience a projected noise level increase between 0 dBA and 3 dBA. This range of a 0 dBA to 3 dBA increase between existing noise levels and the build alternative would barely be perceptible to the human ear. Therefore, under CEQA, no significant noise impact would occur as a result of the project and no mitigation is required. The build alternatives would not significantly contribute to the existing noise levels. Noise levels along Segment 22 are currently loud and would remain loud.

Corridor Noise Impacts CEQA Finding

At the 27-mile project level, the project includes soundwalls for a number of noise receptors (see *Section 3.15*) that are not required under a CEQA analysis. These soundwalls or other noise mitigation elements were incorporated into the project. The mitigation incorporated into the project for both CEQA and NEPA would effectively provide noise mitigation for a large number of locales and receptors along the *I-5 NCC Project*.

At the project segment level, for 20 of the 22 segments analyzed, soundwalls have been incorporated into the project and they would effectively provide noise mitigation. Two segments of the 27-mile project have been determined to be significant after mitigation. Segment 9 identifies receptors R9.2, R9.3, R9.4, R9.4A, R9.14, R9.15, and R9.15A that would be significantly impacted as a result of the project; there are no soundwalls planned for these receptors due to the economic cost of building a soundwall that would result in a perceptible noise reduction. Segment 18 identifies receptors R18.1, R18.8, R18.9, and R18.27 that would be significantly impacted as a result of the project. A soundwall is not planned for these receptors due to the economic cost of building a soundwall that would result in a perceptible reduction.

At the individual receptor level, soundwalls and/or other mitigation alternatives have been incorporated into the project and they would effectively provide noise mitigation. As to those individual receptors that would not receive noise mitigation (receptors R6.6, R6.7, R10.6, R13.8, and R14.6), there are specific economic, legal, social, technological, or other benefits of the project which outweigh the potentially significant effects on the environment.

The receptors identified in *Table 4.1, Receptors Identified as Potentially Significant*, are within the corridor and may be considered potentially significant impacts. Mitigation was considered for these receptors upon balancing, as applicable, the economic, legal, social, technological, or other benefits of the proposed project against its unavoidable environmental risks when determining whether to approve these soundwalls for mitigation. In addition, soundwalls proposed off Caltrans right-of-way are subject to the approval of the property owner. The following receptors were identified as potentially significant and many are eligible for a soundwall as identified in *Table 4.1*.



Table 4.1: Receptors Identified as Potentially Significant

Table 4.1: Receptors Identified as Potentially Significant					
Receptor #	Soundwall #	Location			
R6.4	S603A	804 Ida Avenue			
R6.5	S603A	828 Ida Avenue			
R6.6		708 Castro Street			
R6.7		709 Ida Avenue			
R8.7	S635	2433 Caminito Ocean Cove			
R9.2		1815 MacKinnon Avenue			
R9.3		1725 MacKinnon Avenue			
R9.4		1633 MacKinnon Avenue			
R9.4A		1606 MacKinnon Avenue			
R9.14		1551 Villa Cardiff Drive			
R9.15		1511 Villa Cardiff Drive			
R9.15A		1511 Villa Cardiff Drive			
R10.6		611 Stratford Drive			
R11.27	S686A	Saxony Condominiums - Park			
R13.8		7452 Neptune Drive			
R14.6		Poinsettia Station Apartment			
		Homes - Embarcadero Lane			
R17.11	S810	3300 Eureka Place			
R17.12	S810	Holiday Park			
R17.13	S810	1144 Pine Avenue			
R18.1		1192 Laguna Drive			
R18.1A	S822	1239 Knowles Avenue			
R18.2	S822	1220 Knowles Avenue			
R18.2A	S822	Park - Pio Pico Drive			
R18.3*	S822	1255 Cynthia Lane			
R18.4* ^K	S822	Buena Vista Elementary School			
R18.5	S822	Buena Vista Elementary School -			
10.5	3022	Baseball Field			
R18.6*	S822	1291 Las Flores Drive			
R18.7	S822	1277 Las Flores Drive			
R18.7A	S826	1288 Las Flores Drive			
R18.8*		2351 Pio Pico Drive			
R18.9		2347 Pio Pico Drive			
R18.11	S827	2380 Jefferson Street			
R18.17	S821	2443 Tuttle Street			
R18.18	S821	1111 Buena Vista Way			
R18.19 ^{,K}	S821	2501 Davis Avenue			
R18.20	S821	2530 Davis Avenue			
R18.22	S821	1148 Knowles Avenue			
	0004	1088 Laguna Dr - Carlsbad			
R18.24	S821	Retirement Community			
D10 25	C004	1088 Laguna Dr - Carlsbad			
K 10.25	R18.25 S821 Retirement C				
R18.27		1022 Grand Avenue			
R19.1	S836	1504 Kelly Street			
R19.2	S836	1501 Krim Place			
R19.7	Existing Soundwall Replaced	1613 Lopez Street			
R19.8	Existing Soundwall Replaced	1601 Lopez Street			



Table 4.1 (cont	: Receptors	Identified as	Potentially	Significant

Receptor #	Soundwall #	Location	
R19.12	S846	1504 California Street	
R19.13	S846	1516 California Street	
R19.14	S846	1463 Belleare Street	
R19.15	S846	1431 Belleare Street	
19.25	S845	1246 Laguna Street	
19.26	S845	1426 Moreno Street	
19.27	S845	1464 Moreno Street	
19.28	S845	1474 Moreno Street	
19.35	S841	1637 Griffin Street	
19.36	S841	1256 Alderney Court	
19.43	S835	1250 Kirmar Place	
19.44	S835	1250 Kirmar Place	
19.45	S835	1824 Moreno Street	
R20.2	S863	Ron Ortega Recreation Park	

Construction Impacts

Construction activities, including utility relocations, would likely generate a temporary, short term increase in noise. Because this increase would be temporary and limited to the immediate area surrounding construction and utility relocations activities, it would be a less than significant impact. A combination of attenuation techniques with equipment noise control and administrative measures would be selected to minimize noise disturbances during construction and utility relocation activities. See *Section 3.15* for additional details.

4.3.5 Biological Resources

Natural Communities

As described in *Section 3.17*, the proposed project would result in impacts to riparian, wetland, and eelgrass habitat for natural communities. Impacts to all upland communities would range from 1295.16 ac under the 10+4 Barrier alternative to 1244.92 ac under the refined 8+4 Buffer alternative (Preferred Alternative). The 10+4 Buffer alternative and 8+4 Barrier alternative would result in impacts to 1269.07 ac and 1281.79 ac, respectively.

Impacts to 18.43 ac to 25.55 ac of riparian and wetland habitat, depending on the selected alternative, would be considered significant. Impacts to sensitive upland habitats would total between 63.72 ac and 69.43 ac, depending on the selected alternative, and would also be considered significant.

In addition, permanent impacts to eelgrass for each of the alternatives range from 0.08 ac impacted by the refined 8+4 Buffer alternative to 0.24 ac impacted by the 10+4 Barrier alternative. Temporary impacts to eelgrass would range from 0.22 ac for the refined 8+4 Buffer alternative to 0.37 ac for the 10+4 Barrier alternative. Impacts to eelgrass would be considered significant.

Mitigation provided as part of the *I-5 NCC Project* REMP would reduce these significant impacts to less than significant levels. Additional details regarding mitigation are provided in *Section 3.17*.



Wetlands and Other Waters

As described in *Section 3.18* of this document, net impacts to wetlands and other waters of the U.S. would range from 11.61 ac under the refined 8+4 Buffer alternative (Preferred Alternative) to 17.17 ac of USACE resources under the 10+4 Barrier alternative. Net impacts to State jurisdictional wetlands would range from 15.92 ac under the refined 8+4 Buffer alternative to 23.03 ac under the 10+4 Barrier alternative. Impacts to jurisdictional waters would be considered significant under CEQA.

Mitigation provided as part of the *I-5 NCC Project* REMP would reduce these significant impacts to less than significant levels. Additional details regarding mitigation are provided in *Sections 3.17* and *3.18*. Information about the REMP's relationship to regional lagoon restoration also is addressed therein, and in *Section 3.25*.

Plant, Animal, and Threatened and Endangered Species

The North Coast Corridor contains a number of sensitive (including threatened and endangered) plant and animal species, whose ranges and numbers have been reduced due to past disturbance by urban development and related infrastructure, including I-5.

As discussed in detail in *Sections 3.19* and *3.20* of this Final EIR/EIS, the proposed project could generate impacts to certain sensitive plant and animal species. Because of the status of such sensitive species, the *I-5 NCC Project* would take precautions to avoid construction-period impacts. Avoidance, minimization, and mitigation measures for the proposed project specify that seed would be collected or plants would be salvaged to the extent practicable in the impact areas. Habitat removals would be minimized and mitigated, as discussed in *Sections 3.17* through *3.22* of this document. Implementation of these measures would reduce impacts to sensitive plant and animal species to less than significant levels.

As discussed in detail in *Section 3.21* of this Final EIR/EIS, the proposed project could generate impacts to certain species, including designated critical habitat for the least Bell's vireo, southwestern willow flycatcher, tidewater goby, and the California gnatcatcher. Sensitive bird species that forage and nest within the lagoons at certain times of the year could experience adverse effects on breeding behaviors. Potential temporary impacts could occur to steelhead trout habitat within the San Luis Rey River. Designated critical habitat for several threatened or endangered bird species (i.e., least Bell's vireo and coastal California gnatcatcher) would be removed. In all cases, the *I-5 NCC Project* would minimize and/or mitigate for impacts to sensitive wildlife, wildlife movement, and/or nursery sites. Avoidance, minimization, and mitigation measures identified in *Sections 3.17* through *3.22* would reduce impacts to these species to less than significant levels.

Conformance with Local Policies, Ordinances, and Conservation Plans

Conformance of the *I-5 NCC Project* with local policies and ordinances addressing biological resources is discussed in *Section 3.1* and detailed in *Table 3.1.1*. The analysis and mitigation relevant to the applicable protected resources are provided in *Sections 3.17* through *3.22* of this Final EIR/EIS. Although Caltrans and FHWA are not signatory agencies to the local HCP, MSCP, and/or MHCP efforts, Caltrans has coordinated with the cities and wildlife agencies to ensure that potential impacts to species or habitats protected under local conservation plans would be minimized and/or mitigated to less than significant levels (see discussion of the project REMP in *Section 3.17* of this Final EIR/EIS). Additionally, the project REMP, which addresses impacts and mitigation requirements for a number of transportation improvements



(highway, rail, local street, etc.) throughout the North Coast Corridor, provides a regional approach similar to the MSCP/MHCP plans.

Conclusion

As detailed above, measures to avoid or substantially lessen impacts have been incorporated into the project. These measures would reduce impacts to below a level of significance. The measures are incorporated into the ECR, which comprises a program for reporting on or monitoring implementation of the measures, pursuant to CEQA Guidelines Section 15091(d).

4.4 Unavoidable Significant Environmental Effects

Impacts to Visual/Aesthetics (for all four build alternatives) and Community Character and Cohesion (for the 10+4 barrier alternative) would remain significant after mitigation identified in *Chapter 3*.

4.4.1 Visual/Aesthetics

I-5 already constitutes a transportation feature within the viewscape for viewers who see it from community locations to the east or west. The portion of I-5 that is designated as scenic highway is not affected. I-5 does not extend over large blocks of land in an east-west direction (which would support increased visibility) but is a relatively narrow visual element in a much larger viewscape. A scenic vista is being enhanced by the project, just north of Manchester Avenue on the west side. Given the varying topography of the North Coast Corridor and the amount of other built elements, I-5 is not the predominant visual feature, which generally would be expected to be the Pacific Ocean, or nearby hillsides.

Visually, when considered in the context of (1) most community views being focused toward the ocean, as well as (2) existing North Coast Corridor development density, (3) existing topographic or manmade features that intervene between the viewer and I-5 throughout most of the North Coast Corridor communities, and (4) the presence of the existing eight-lane facility, I-5 improvements are not expected to substantially change the visual experience of the larger communities surrounding it.

Viewers along the corridor would continue to be exposed to a mix of open vistas, including views of the ocean and lagoons, and views that are blocked by development or changed due to implementation of project landscaping (similar to existing conditions). Specific to ocean views, view impacts from the project to the coastline, lagoons, and river valleys would be avoided or minimized as a matter of project design. These resources are typically most visible across or below the corridor's large lagoon and river bridges, and these views would be maintained.

As described in Section 3.7, however, all four build alternatives would result in highly adverse changes to the existing visual environment along the I-5 right-of-way, primarily related to construction of retaining walls and potential sound barriers. While impacts to visual resources would be similar for all four build alternatives, the 10+4 Barrier alternative would result in the greatest change to the existing visual environment because this alternative would require the greatest amount of additional pavement. Conversely, the refined 8+4 Buffer alternative (Preferred Alternative) would result in the least amount of change to the existing visual



environment, because it would require the least amount of additional pavement. The increase in build elements could be considered to substantially degrade the existing visual character of the I-5 right-of-way. Potentially significant CEQA impacts to I-5 views range from moderate visual impact to high visual impact.

No new source of substantial light or glare would be generated, since the project addresses the widening of an existing facility; impacts would be less than significant.

Conclusion

As detailed in *Section 3.7*, measures to avoid or substantially lessen impacts have been incorporated into the project. These measures are incorporated into the ECR, which comprises a program for reporting on or monitoring implementation of the measures, pursuant to CEQA Guidelines Section 15091(d). Nonetheless, impacts would remain significant. Additional measures or alternatives that would reduce impacts to below a level of significance would be infeasible due to the nature of widening an existing interstate in a scenic area.

4.4.2 Community Character and Cohesion

The 10+4 Barrier alternative would displace a 47-unit apartment complex in northern Carlsbad within an area identified as exhibiting traits of elevated community cohesion: namely, a relatively high concentration of linguistically isolated Spanish-speaking households, as well as a high proportion of minority populations. As discussed in *Section 3.4*, displaced residents living in these 47 units may be difficult to relocate within a similar community as the availability of apartments within Carlsbad with similar rental rates is not adequate. If relocation is not feasible in Carlsbad and up to 47 families are relocated outside of the community, this may adversely impact community cohesion in the area, which would be considered a significant impact. The refined 8+4 Buffer alternative, which has been identified as the Preferred Alternative, would avoid impacts to this apartment complex. If the 10+4 Barrier alternative is ultimately selected for implementation, findings regarding the infeasibility of the 8+4 Buffer alternative would be required.

4.5 Significant Irreversible Environmental Changes

Implementation of the project would involve a commitment of natural, physical, human, and fiscal resources. Land used in the construction of the proposed facilities is considered an irreversible commitment during the time period that the land would be used for the highway facility. Although the land can be converted to another use if a greater need arises for use of the land or if the facilities are no longer needed, at present, there is no reason to believe such a conversion would ever be necessary or desirable. The following land uses and environmental resources would be committed: wetlands, sensitive species, natural communities, farmlands, residences, business locations, floodplains, cultural resources, and visual resources. Please refer to relevant sections of *Chapter 3* of this Final EIR/EIS, as well as *Section 3.24*, for additional discussion.

Although such resources are generally not retrievable, their commitment is based on the concept that individuals in the immediate area, region, and State would benefit from the improved quality of the transportation system. These benefits would consist of improved accessibility and safety, savings in time and fuel, and the provision of a dependable



transportation system; these benefits are expected to outweigh the commitment of these resources.

4.6 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988, has led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity including carbon dioxide (CO₂), methane (CH_4) , nitrous oxide (N_2O) , tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6) , HFC-23 (fluoroform), HFC-134a (s, s, s, 2-tetrafluoroethane), and HFC-152a (difluoroethane).

In the U.S., the main source of GHG emissions is electricity generation, followed by transportation. In California, however, transportation sources (including passenger cars, light duty trucks, other trucks, buses, and motorcycles make up the largest source (second to electricity generation) of GHG emitting sources. The dominant GHG emitted is CO₂, mostly from fossil fuel combustion.

There are typically two terms used when discussing the impacts of climate change. "Greenhouse Gas Mitigation" is a term for reducing GHG emissions in order to reduce or "mitigate" the impacts of climate change. "Adaptation," refers to the effort of planning for and adapting to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels).²

There are four primary strategies for reducing GHG emissions from transportation sources: (1) improving the transportation system and operational efficiencies, (2) reducing the growth of vehicle miles traveled (VMT), (3) transitioning to lower GHG emitting fuels, and (4) improving vehicle technologies. To be most effective all four strategies should be pursued cooperatively. The following Section 4.6.1, Regulatory Setting, outlines State and federal efforts to comprehensively reduce GHG emissions from transportation sources.

4.6.1 Regulatory Setting

State

With the passage of several pieces of legislation including State Senate and Assembly Bills (SBs, ABs) and Executive Orders (EOs), California launched an innovative and pro-active approach to dealing with GHG emissions and climate.

AB 1493, Pavley, Vehicular Emissions: Greenhouse Gases, 2002: requires the California Air Resources Board (CARB) to develop and implement regulations to reduce automobile and

² http://climatechange.transportation.org/ghg_mitigation/



light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year. In June 2009, the United States Environmental Protection Agency (USEPA) Administrator granted a Clean Air Act waiver of preemption to California. This waiver allowed California to implement its own GHG emission standards for motor vehicles beginning with model year 2009. California agencies will be working with federal agencies to conduct joint rulemaking to reduce GHG emissions for passenger cars model years 2017-2025.

EO S-3-05 (signed on June 1, 2005, by former Governor Arnold Schwarzenegger): the goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below the year 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of AB 32.

AB 32, the Global Warming Solutions Act of 2006, Núñez and Pavley: sets the same overall GHG emissions reduction goals as outlined in EO S-3-05, while further mandating that CARB create a scoping plan (which includes market mechanisms) and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases."

Senate Bill 375 (SB 375), Chapter 728, 2008 Sustainable Communities and Climate Protection: requires CARB to set regional emissions reduction targets from passenger vehicles. The Metropolitan Planning Organization for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land use, and housing policies to plan for achievement of the emissions target for their region.

Senate Bill 391 (SB 391), Chapter 913, 2009: requires the State's long-range transportation plan to meet California's climate change goals under AB 32.

EO S-20-06 (signed on October 18, 2006 by former Governor Arnold Schwarzenegger): further directs State agencies to begin implementing AB 32, including the recommendations made by California's Climate Action Team.

EO S-01-07 (signed on January 18, 2007 by former Governor Arnold Schwarzenegger): set forth the low carbon fuel standard for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020.

SB 97, Chapter 185, 2007: required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the CEQA Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

Caltrans Director's Policy 30 (DP-30) Climate Change (approved June 22, 2012): is intended to establish a Caltrans policy that will ensure coordinated efforts to incorporate climate change into Caltrans decisions and activities. This policy contributes to Caltrans' stewardship goal to preserve and enhance California's resources and assets.

Federal

Although climate change and GHG reduction is a concern at the federal level; currently there are no regulations or legislation that have been enacted specifically addressing GHG emissions reductions and climate change at the project level. Neither the USEPA nor the FHWA has promulgated explicit guidance or methodology to conduct project-level GHG analysis. As stated on FHWA's climate change website (http://www.fhwa.dot.gov/hep/climate/index.htm), climate



change considerations should be integrated throughout the transportation decision-making process—from planning through project development and delivery. Addressing climate change mitigation and adaptation up front in the planning process will facilitate decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project level decision-making. Climate change considerations can easily be integrated into many planning factors, such as supporting economic vitality and global efficiency, increasing safety and mobility, enhancing the environment, promoting energy conservation, and improving the quality of life.

The four strategies outlined by FHWA to lessen climate change impacts correlate with efforts that the State is undertaking to deal with transportation and climate change; these strategies include improved transportation system efficiency, cleaner fuels, cleaner vehicles, and a reduction in travel activity.

Climate change and its associated effects are being addressed through various efforts at the federal level to improve fuel economy and energy efficiency, such as the "National Clean Car Program" and EO 13514 - Federal Leadership in Environmental, Energy and Economic Performance.

EO 13514 is focused on reducing GHGs internally in federal agency missions, programs and operations, but also direct federal agencies to participate in the Interagency Climate Change Adaptation Task Force, which is engaged in developing a national strategy for adaptation to climate change.

On April 2, 2007, in *Massachusetts v. EPA*, 549 U.S. 497 (2007), the Supreme Court found that GHGs are air pollutants covered by the Clean Air Act and that the USEPA has the authority to regulate GHG. The Court held that the USEPA Administrator must determine whether or not emissions of GHGs from new motor vehicles cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision.

On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator found that the current and projected concentrations of the six key well-mixed GHGs—carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)—in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator found that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare.

Although these findings did not themselves impose any requirements on industry or other entities, this action was a prerequisite to finalizing the USEPA's Proposed Greenhouse Gas Emission Standards for Light-Duty Vehicles, which was published on September 15, 2009.³ On May 7, 2010 the final Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards was published in the Federal Register.

-

³ http://www.epa.gov/oms/climate/regulations.htm#1-1



USEPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines. These next steps include developing the first-ever GHG regulations for heavy-duty engines and vehicles, as well as additional light-duty vehicle GHG regulations. These steps were outlined by President Obama in a Presidential Memorandum on May 21, 2010.⁴

The final combined USEPA and NHTSA standards that make up the first phase of this national program apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The standards require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide (CO₂) per mile, (the equivalent to 35.5 miles per gallon [MPG] if the automobile industry were to meet this CO₂ level solely through fuel economy improvements). Together, these standards will cut GHG emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

On November 16, 2011, USEPA and NHTSA issued their joint proposal to extend this national program of coordinated GHG and fuel economy standards to model years 2017 through 2025 passenger vehicles.

4.6.2 Project Analysis

Transportation, particularly motor vehicles, is a large source of GHG emissions. Transportation (including cars, trucks, trains, planes, and ships) is estimated to be responsible for 38 percent of California GHG emissions in 2009.⁵

An individual transportation project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of GHG.⁶ In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines sections 15064(h)(1) and 15130). To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects.

The AB 32 Scoping Plan mandated by AB 32 contains the main strategies California will use to reduce GHG emissions. As part of its supporting documentation for the Draft Scoping Plan, CARB released the GHG inventory for California (forecast last updated: October 28, 2010). The forecast is an estimate of the emissions expected to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. The base year used for forecasting emissions is the average of statewide emissions in the GHG inventory for 2006, 2007, and 2008.

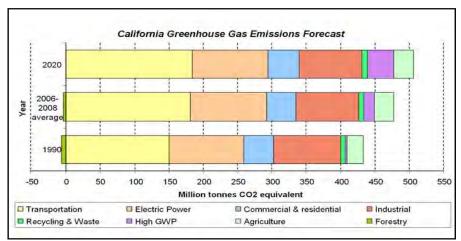
-

^{4 &}lt;a href="http://epa.gov/otag/climate/regulations.htm">http://epa.gov/otag/climate/regulations.htm

http://www.arb.ca.gov/cc/inventory/pubs/reports/ghg_inventory_00-09_report.pdf

This approach is supported by the AEP: Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents (March 5, 2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).





Source: http://www.arb.ca.gov/cc/inventory/data/forecast.htm

Figure 4-1: California Greenhouse Gas Inventory

Caltrans has created and is implementing the "Climate Action Program" that was published in December 2006⁷ and has taken an active role in directly addressing GHG emission reductions, mainly through two of the primary GHG reducing strategies mentioned at the beginning of this section: (1) improving the transportation system and operational efficiencies and (2) reducing the growth of VMT.

One of the main strategies in the Caltrans' Climate Action Program to reduce GHG emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 mph) and speeds over 55 mph; the most severe emissions occur from 0-25 mph (see *Figure 4-2*). To the extent that a project relieves congestion by enhancing operations and improving travel times in high congestion travel corridors GHG emissions, particularly CO₂, may be reduced.

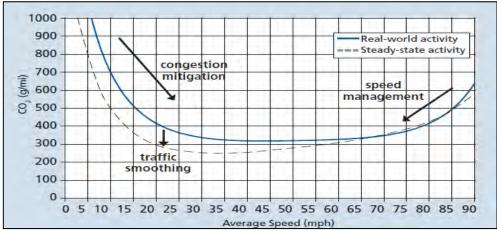


Figure 4-2: Possible Effect of Traffic Operation Strategies in Reducing On-Road CO₂ Emission⁸

Caltrans Climate Action Program is located at the following web address: http://www.dot.ca.gov/hg/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/Caltrans_Climate_Action_Program.pdf

Traffic Congestion and Greenhouse Gases: Matthew Barth and Kanok Boriboonsomsin (TR News 268 May-June 2010) http://onlinepubs.trb.org/onlinepubs/trnews/trnews/trnews268.pdf>



In *Chapter 1* of this document, it is written that the purpose of the proposed project is to maintain or improve the existing and future traffic operations in the I-5 North Coast Corridor in order to improve the safe and efficient regional movement of people and goods for the planning design year of 2030. The proposed HOV/Managed Lanes project is designed to reduce congestion and/or vehicle time delays, as evidenced in *Section 1.3.2* of this document, by better matching traffic demand with a transportation system that can efficiently handle traffic volumes. This project includes two DARs that provide access for HOV/Managed Lanes users directly on to the HOV/Managed Lanes. Multimodal and TDM elements have been incorporated into each build alternative (*Section 2.2.3*).

Travel time and congestion are indicators of the efficiency of the system. In 2006, it took an average of 23–25 minutes to drive the 27 miles in either direction on I-5 between Harbor Drive at the north end of the corridor and La Jolla Village Drive at the south end. During the peak periods in 2006, average southbound travel time increased to 32 minutes in the afternoon (PM peak hour) and 35 minutes in the morning (AM peak hour). Northbound average travel time increased to 30 minutes during the afternoon peak period (PM peak hour). The corridor also experiences consistent southbound weekend congestion, resulting in a corridor travel time of up to 30 minutes, approximately 6 minutes longer than free-flow travel times, which is approximately 24 minutes. The peak-period congestion and travel-time degradation are compounded by the multi-purpose trip nature of this highway that serves not only high volumes of commute trips, but also recreational, regional, interregional, and short-distance local trips.

By 2030, traffic studies show that with no improvements to I-5, congestion is predicted to expand significantly as compared to 2006 conditions, to the extent that the entire length of the corridor in both directions is projected to experience severe congestion and traffic delay during the peak periods (Series 10 traffic model, 2030). In addition, if no improvements are made to I-5, forecasts indicate that the projected increases in average daily traffic will extend the time duration of congestion in both the northbound and southbound directions. In 2006, congestion lasted on average five hours in both the northbound and southbound directions. Without project improvements, as early as 2030, travel time is projected to increase to 53 to 54 minutes in the AM peak period and 40 to 48 minutes in the PM peak period. The period of time for which drivers would experience this congestion also would increase for both AM and PM peak travel periods, from five hours in 2006 to six hours in the future. By 2030, if no improvements are made to I-5, congested travel hours would more than double, with northbound congestion forecast to extend to 9-10 hours and southbound congestion to extend to 13 hours.

Caltrans uses VMT data to analyze the existing and future predicted demand on a particular transportation facility, corridor, or system, to assess the present use of and the predicted future needs for the facility, corridor, or system. This same factor (VMT) is also used to assess the current and future emissions generated from motor vehicles burning fossil fuels, and is generally viewed as a direct relationship: an increase in VMT equals increased air emissions. It should be noted, however, that freeway VMT is only one component of the air quality analysis; vehicle speeds and associated changes in VMT on local roadways are also important factors.

_

⁹ The GHG analysis uses year 2030, but the traffic discussion in *Section 3.6* clarified that the use of 2030 traffic analysis is equally relevant through 2042 based on the Series 10, 11 and 12 analysis.



Studies conducted for the *I-5 NCC Project* show the corridor would experience significant growth in travel demand, with the growth of VMT occurring regardless of whether highway capacity improvements are made. In other words, the planned improvements to *I-5* would not significantly induce travel on the highway; rather, they would make already occurring travel more efficient and reliable. Forecasts show, that with no improvements, VMT would increase by between 20.1 percent (Series 11 traffic model, 2030) and 29.6 percent (Series 12 traffic model, 2040). These percentages indicate that without any improvements, the highway would be unprepared to meet future traffic demand.

However, the results are different with the addition of the proposed four HOV/Managed Lanes (managed for carpools, vanpools, transit, and paying single-occupancy vehicles [SOVs]). With these lanes, the travel forecasts project only an additional 4.0 percent (Series 10 and Series 11 traffic models, 2030) to 5.9 percent (Series 12 traffic model, 2040).

Policies, plans, and programs to reduce transportation emissions are evaluated on a regional and State level, with San Diego County regional policies being implemented through the regional transportation planning and the Regional Transportation Program (RTP) made up of proposed improvement projects, such as the *I-5 NCC Project*. The improvements proposed in the *I-5 NCC Project* are intended to not only implement the regional transportation planning, but also to implement key strategies for reducing GHG emissions by improving the transportation system and operational efficiencies, and reducing the growth of VMT. The purpose of the transportation improvements proposed in the *I-5 NCC Project* are to efficiently move more people, and not necessarily more vehicles, to maintain or improve the existing and future traffic operations in the *I-5 North Coast Corridor* in order to improve the safe and efficient regional movement of people and goods for the planning design year of 2050, which would therefore reduce regional VMT growth. Specifically, the 8+4 Barrier/Buffer alternatives include only new HOV lanes, with no new general purpose lanes. If determined to be a regional goal in the future, these lanes could be converted to be used only by transit operators.

The composition of transportation projects in San Diego County and the design of the transportation network in the 2050 RTP are heavily influenced by the GHG goals set in SB 375 and targets set in CARB for cars and light trucks. SANDAG has determined that the best way to meet the GHG reductions is to provide the general public and those who move goods with convenient multimodal travel options that maximize productivity and reduce the costs and time associated with travel. The *I-5 NCC Project* would assist in the achievement of this goal by providing incentives for people to carpool and use the HOV/Managed Lanes to help reduce overall growth in VMT. There would be community and regional enhancements that encourage bicycle and pedestrian travel and the project design would accommodate a future BRT. In accordance with SB 375, the building blocks of the SCS include the following:

- A land use pattern that accommodates the region's future employment and housing needs, and that protects sensitive habitats and resource areas.
- A transportation network of public transit and Express Lanes, and highways, local streets, bikeways, and walkways built and maintained with available funds.
- Managing demands on the transportation system (also known as transportation demand management [TDM]) in a way that reduces or eliminates traffic congestion during peak periods of demand.



- Managing the transportation system (also known as transportation system management [TSM]) through measures that maximize the efficiency of the transportation network.
- Innovative pricing policies and other measures designed to reduce VMT and traffic congestion during peak periods of demand.

The 2050 RTP and SCS guide the San Diego region toward a more sustainable future by focusing housing and job growth in urbanized areas, protecting sensitive habitat and open space, and investing in a transportation network that provides residents and workers with transportation options that will help reduce GHG emissions. It is anticipated that with each RTP (every four years) there will be new opportunities to help reduce GHG emissions. The region-wide 2050 RTP/SCS reduces energy consumption and GHG emissions with the following key achievements:

- Meets state GHG reduction mandates.
- Funds \$2.7 billion for regional and local bicycle and pedestrian projects and programs.
- Provides 156 new miles of trolley service and a new trolley tunnel in downtown San Diego.
- Expands and speeds up COASTER service in the North Coast Corridor.
- More than doubles the transit service miles and increases transit frequency in key corridors.
- Creates 130 miles of Express Lanes to facilitate carpools, vanpools, and premium bus service and creates new carpool and telework incentive programs to reduce solo driving.
- Doubles the number of homes and jobs within one-half mile of transit.

The 2050 RTP includes a network that integrates many modes of transportation, with a mix of projects and a wide variety of transportation choices distributed across the region. This multimodal network is expected to promote a substantial increase in carpooling, demands for public transit, and bicycling and walking for work trips both during peak hours and at other times. The 2050 RTP contains the largest investment in bicycle and pedestrian infrastructure of any San Diego RTP to date. These investments are expected to dramatically increase bicycle and walking trips (a 120 percent increase, compared with the No Build Alternative). Carpooling—expressed as a percentage of all modes of transportation used to get to work—is expected to increase by 48 percent. The implementation of the *I-5 NCC Project* is a highway component of this plan and supports the bicycle and pedestrian infrastructure.

The 2050 RTP's transportation infrastructure, including the *I-5 NCC Project* improvements, will also help reduce congestion for autos, trucks, and public transit. The percentage of peak-period auto travel occurring during congested periods is projected to drop from 27.7 percent with no improvements to 17.2 percent under the 2050 RTP. Similarly, congested conditions for peak-period transit travel are projected to drop by nearly half (from 9.1 percent to 5.1 percent) under the 2050 RTP. The number of hours of delay per day for trucks will also be cut in half (from 32,300 hours to 16,000 hours) with the implementation of the 2050 RTP.

This project is included in the 2007 FSTIP as amended in 2009 and 2011, and included in SANDAG's 2050 Regional RTP/SCS and the 2012 RTIP. Traffic conditions projected for 2030 in the 2010 Draft EIR/EIS are consistent with current projections (see discussion of this topic in *Sections 1.3.2* and *3.6* of this Final EIR/EIS).



4.6.3 Quantitative Analysis

To estimate the potential beneficial or negative effect of the proposed project on San Diego regional GHG levels, the CARB EMFAC 2007 vehicle emissions model for the SDAB was used to calculate CO₂ emissions for the San Diego metropolitan area with and without the proposed project.

In order to determine regional GHG emissions, the I-5 Northcoast Series 11 GHG Regional Effects travel demand models were utilized for the build and no build scenarios. Regional fuel consumption and CO₂ emissions were modeled with and without the build scenario for each respective time horizon.

The results of the regional fuel consumption and CO_2 emissions models are shown in Table 4.2.

Table 4.2: Average Difference in Regional CO₂ Emissions

Alternative	2006 Existing	2030 No Build	2030 10+4 w/DARs	2030 8+4 w/DARs
Model Year	2006	2030	2030	2030
Fuel Consumption (gallons/day)	4,139,840	5,866,570	5,829,250	5,830,190
Efficiency Fuel Savings (gallons/day)	N/A	N/A	37,320	36,380
Diesel Fuel Consumption (gallons/day)	497,950	655,770	657,040	657,150
Efficiency Fuel Savings (gallons/day)	N/A	N/A	-1,270	-1,380
Regional CO ₂ Annual Average Emissions (tons/day)	44,940	64,260	63,910	63,920
Efficiency CO ₂ Savings (tons/day)	N/A	N/A	350	340

Compared to the No Build alternative, implementation of the 10+4 Barrier/Buffer alternatives is estimated to reduce 2030 CO_2 emissions in the San Diego Region by up to 350 tons per day. Compared to the No Build alternative, implementation of the 8+4 Barrier/Buffer alternatives is estimated to reduce 2030 CO_2 emissions in the San Diego Region by up to 340 tons per day. These decreases would be due to the decreased congestion along the corridor and improved travel times along the corridor. Therefore, it is concluded that regional transportation efficiency would be increased and overall CO_2 emission would be reduced.

Currently, the emissions modeling software is limited to generating output only for freeway mainlines, and not local streets. Therefore, the above analysis does not reflect any reduction in GHG emissions that could result from reduced queue lengths at ramp meters and intersections. Because the proposed project would reduce delay at these locations, there is the potential for further reduction in GHG emissions from vehicles spending less time idling.



4.6.4 Construction Emissions

GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events.

Air Quality measures to minimize emissions for construction equipment include:

- Use low-emission on-site mobile construction equipment where feasible.
- Maintain equipment in tune per manufacturer's specifications.
- Retard diesel engine injection timing by two to four degrees unless not recommended by manufacturer (due to lower emission output in-place).
- Use reformulated, low-emission diesel fuel.
- Substitute electric and gasoline-powered equipment for diesel-powered equipment where feasible.
- Use catalytic converters on gasoline-powered equipment.
- Do not leave inactive construction equipment idling for prolonged periods.

Traffic and Transportation measures to minimize energy consumption and GHG emissions include the following:

- Construction phasing plan to identify sequence of construction and to help minimize traffic delays.
- Traffic delays controlled to the extent feasible during periods of many simultaneous construction operations.
- Comprehensive TMP to further minimize delays during construction. TMP is designed to increase driver awareness, ease congestion, and minimize delay during construction. Components include:
 - o Public Awareness Program including changeable message signs, public service announcements via media, and 800 number.
 - Traffic Operations Strategies Program, which includes ongoing evaluation of traffic operations and provides incident response during construction, CHP construction zone speed reduction enforcement, and alternate route strategies.

Construction of the proposed project would result in GHG emissions, which are primarily associated with use of off-road construction equipment and vehicles, with a smaller contribution from on-road construction and worker vehicles. The numbers reported in *Table 4.3* below are estimated annual GHG construction emissions using Sacramento Metropolitan Air Quality District (SMAQMD) Road Construction Model - Version 6.3.2 to calculate emissions for the proposed bridge construction and roadway widening. Assumptions are made by the model for the relative mix of CO_2 , CH_4 , and N_2O emissions from diesel fuel used in off-road and on-road vehicles as reported in the California Climate Action registry's (CCAR) General Reporting Protocol.



Table 4.3: Estimated Annual Construction GHG Emissions

Improvement	Tons CO ₂	MT CO₂E
Bridge Construction	399	365
Roadway Widening	1,938	1,764
TOTAL	2,337	2,129

Source: Dudek Draft Greenhouse Gas Assessment, October 2011

 CO_2E = Carbon Dioxide Equivalent; MT = metric tons.

When considered on a global scale and amortized over the life of the proposed improvements, the projected construction emissions are relatively minor. In addition, as previously stated, the *I-5 NCC Project* improvements are included in the 2050 RTP/SCS transportation network improvements phased project list; therefore, the *I-5 NCC Project* improvements and associated emissions were analyzed in the 2050 RTP/SCS EIR. The 2050 RTP/SCS EIR estimated annual construction emissions from construction activities, including worker vehicle trips, transport of materials to and from the construction site, and operation of construction equipment.

Conclusion

While construction would result in a slight increase in GHG emissions during construction, the project would result in a decrease in operational GHG emissions when comparing the future build to the future no-build conditions. Operational improvements are projected to result in a decrease of approximately 124,000 tons per year of CO₂, relative to construction emissions of less than 3,000 tons per year. As a result, the net impact would be beneficial and, therefore, less than significant. Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

4.6.5 AB 32 Compliance

Caltrans continues to be actively involved on the Governor's Climate Action Team as CARB works to implement the Governor's EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year. Former Governor Arnold Schwarzenegger's Strategic Growth Plan calls for a \$222 billion infrastructure improvement program to fortify the State's transportation system, education, housing, and waterways, including \$100.7 billion in transportation funding during the next decade The Strategic Growth Plan targets a significant decrease in traffic congestion below today's level and a corresponding reduction in GHG emissions. The Strategic Growth Plan proposes to do this while accommodating growth in population and the economy. A suite of investment options has been created that combined together yield the promised reduction in congestion. The Strategic Growth Plan relies on a complete systems approach to attain CO₂ reduction goals: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements as depicted in *Figure 4-3*.





Figure 4-3: The Mobility Pyramid

Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. Caltrans works closely with local jurisdictions on planning activities but does not have local land use planning authority. Caltrans also assists efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, as well as, light- and heavy-duty trucks; Caltrans is doing this by supporting ongoing research efforts at universities, by supporting legislative efforts to increase fuel economy, and by its participation on the Climate Action Team. It is important to note, however, that the control of the fuel economy standards is held by the USEPA and CARB.

Table 4.4 summarizes Caltrans' and Statewide efforts for implementation in order to reduce GHG emissions. For more detailed information about each strategy, please see Climate Action Program at Caltrans (December 2006); it is available at http://www.dot.ca.gov/docs/ClimateReport.pdf.



Table 4.4: Climate Change Strategies

Strategy	Program	Partnership		Method/Process	Estimated CO ₂ Savings (MMT)	
	3	Lead	Agency		2010	2020
	Intergovernmental Review	Caltrans	Local Governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
Smart Land Use	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	0.975	7.8
Operational Improvements & ITS Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	0.007	2.17
Mainstream Energy & GHG into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, California Environmental Protection Agency (CalEPA), CARB, California Energy Commission		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	0.0045	0.0065 0.45 0.0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	0.117	0.34
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries		2.5% limestone cement mix 25% fly ash cement mix > 50% fly ash/slag mix	1.2 0.36	4.2 3.6
Goods Movement	Office of Goods Movement	CalEPA; CARB; Business, Transportation, and Housing Agency; MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
TOTAL 2.72				18.18		

MMT = million metric tons



The following measures are also included in the project (as described in *Chapter 2* of this Final EIR/EIS) to reduce the GHG emissions and potential climate change impacts from the project:

- Caltrans and the California Highway Patrol are working with regional agencies to implement ITS to help manage the efficiency of the existing I-5 highway system. ITS commonly consists of electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.
- Park-and-ride facility installation or enhancement by Caltrans. In addition, Caltrans, SANDAG, participating corporations, and local governments are providing ridesharing services and park and ride facilities to help manage the growth in demand for highway capacity.
- Landscaping reduces surface warming, and through photosynthesis, decreases CO₂.
 The project proposes extensive landscaping within I-5 right-of-way (road edge and median, as appropriate), including shrubs and trees. This would help offset tons of CO₂ per year.
- 4. Use of energy efficient lighting, such as LED traffic signals. LED bulbs cost \$60 to \$70 apiece but last five to six years, compared to the one-year average lifespan of the incandescent bulbs previously used. The LED bulbs themselves consume 10 percent of the electricity of traditional lights, which would also help reduce CO₂ emissions.¹⁰
- 5. According to Caltrans Standard Specifications, the contractor must comply with all of the local Air Pollution Control District's (APCD) rules, ordinances, and regulations in regards to air quality restrictions. Specifically, as noted in Section 3.14 of this Final EIR/EIS, inactive construction equipment would not be allowed to idle for prolonged periods.

4.6.6 Adaptation Strategies

"Adaptation strategies" refer to how Caltrans and others can plan for the effects of climate change on the State's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damage to roadbeds by longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

At the federal level, the Climate Change Adaptation Task Force, co-chaired by the Council on Environmental Quality (CEQ), the Office of Science and Technology Policy (OSTP), and the National Oceanic and Atmospheric Administration (NOAA), released its interagency report on October 14, 2010 outlining recommendations to President Obama for how federal agency

.

¹⁰ Knoxville Business Journal, "LED Lights Pay for Themselves," May 19, 2008 at http://www.knoxnews.com/news/2008/may/19/led-traffic-lights-pay-themselves/.



policies and programs can better prepare the United States to respond to the effects of climate change. The Progress Report of the Interagency Climate Change Adaptation Task Force recommends that the federal government implement actions to expand and strengthen the nation's capacity to better understand, prepare for, and respond to climate change.

Climate change adaptation must also involve the natural environment as well. Efforts are underway on a Statewide-level to develop strategies to cope with impacts to habitat and biodiversity through planning and conservation. The results of these efforts will help California agencies plan and implement mitigation strategies for programs and projects.

On November 14, 2008, former Governor Arnold Schwarzenegger signed EO S-13-08 which directed a number of State agencies to address California's vulnerability to sea level rise caused by climate change. This EO set in motion several agencies and actions to address the concern of sea level rise.

The California Natural Resources Agency (Resources Agency) was directed to coordinate with local, regional, State, and federal public and private entities to develop the California Climate Adaptation Strategy (December 2009),¹¹ which summarizes the best known science on climate change impacts to California, assesses California's vulnerability to the identified impacts and then outlines solutions that can be implemented within and across State agencies to promote resiliency.

The strategy outline is in direct response to EO S-13-08, which specifically asked the Resources Agency to identify how State agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events. Numerous other State agencies were involved in the creation of the Adaptation Strategy document, including the California Environmental Protection Agency; Business, Transportation and Housing; Health and Human Services; and the Department of Agriculture. The document is broken down into strategies for different sectors that include: Public Health; Biodiversity and Habitat; Ocean and Coastal Resources; Water Management; Agriculture; Forestry; and Transportation and Energy Infrastructure. As data continue to be developed and collected, the State's adaptation strategy will be updated to reflect current findings.

The Resources Agency was also directed to request the National Academy of Science to prepare a Sea Level Rise Assessment Report by December 2010¹² to advise how California should plan for future sea level rise. The report is to include:

- relative sea level rise projections for California, Oregon, and Washington taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge, and land subsidence rates:
- the range of uncertainty in selected sea level rise projections;
- a synthesis of existing information on projected sea level rise impacts to State infrastructure (such as roads, public facilities, and beaches), natural areas, and coastal and marine ecosystems; and
- a discussion of future research needs regarding sea level rise.

.

¹¹ http://www.energy.ca.gov/2009publications/CNRA-1000-2009-027/CNRA-1000-2009-027-F.PDF

Pre-publication copies of the report, Sea Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future, were made available from the National Academies Press on June 22, 2012. For more information, please see http://www.nap.edu/catalog.php?record_id=13389.



Prior to the release of the final Sea Level Rise Assessment Report, all State agencies that are planning to construct projects in areas vulnerable to future sea level rise were directed to consider a range of sea level rise scenarios for the years 2050 and 2100 in order to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. Sea level rise estimates should also be used in conjunction with information regarding local uplift and subsidence, coastal erosion rates, predicted higher high water levels, storm surge, and storm wave data.

Interim guidance has been released by The Coastal Ocean Climate Action Team (CO-CAT) as well as Caltrans as a method to initiate action and discussion of potential risks to the states infrastructure due to projected sea level rise.

All projects that have filed a Notice of Preparation (NOP) as of the date of the EO S-13-08, and/or are programmed for construction funding through 2013, or are routine maintenance projects may, but are not required to, consider these planning guidelines.

EO S-13-08 also directed the Business, Transportation, and Housing Agency to prepare a report to assess vulnerability of transportation systems to sea level rise affecting safety, maintenance, and operational improvements of the system and economy of the State. Caltrans continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

Currently, Caltrans is working to assess which transportation facilities are at greatest risk from climate change effects. However, without statewide planning scenarios for relative sea level rise and other climate change effects, Caltrans has not been able to determine what change, if any, may be made to its design standards for its transportation facilities. Once statewide planning scenarios become available, Caltrans will be able review its current design standards to determine what changes, if any, may be warranted in order to protect the transportation system from sea level rise.

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. Caltrans is an active participant in the efforts being conducted in response to EO S-13-08 and is mobilizing to be able to respond to the National Academy of Science Sea Level Rise Assessment Report.

The NOP for this project was filed prior to this EO (October 20, 2004), and if approved, will be in final design (rather than construction) through 2013. Although exempt from this requirement, sea level rise review relative to I-5 crossings of coastal lagoons and their primary tributaries was completed.

The following screening criteria were considered:

- Project design life, 20+ years
- Redundancy/alternative routes
- Anticipated travel delays
- Good movement/interstate commerce
- Evacuations/emergencies
- Traveler safety, in delaying the project to incorporate sea level rise design



- Expenditure of public funds
- Scope of project
- Interconnectivity issues with local streets and roads
- Environmental constraints, i.e., increase in project footprint into environmentally sensitive areas

The Ocean Protection Council adopted Statewide sea level rise values (*Table 4.5*), and a sea level rise interim guidance document in March 2011. Caltrans participated in the development of this first set of Statewide scenarios. This common set of values allows all State agencies to plan for sea level rise with the same assumptions. This document would be revised when the NAS releases their final sea level rise values, but in the interim, provided a standardized set of assumptions to use when projecting potential sea level rise effects.

Table 4.5: Sea Level Rise Projections Using 2000 Baseline

Year	Rise	Average of Models	Range of Models
2030		7 in	5-8 in
2050		14 in	10-17 in
	Low	23 in	17-27 in
2070	Medium	24 in	18-29 in
	High	27 in	20-32 in
	Low	40 in	31-50 in
2100	Medium	47 in	37-60 in
	High	55 in	43-69 in

For dates after 2050, *Table 4.5* includes three different values for sea level rise; based on low, medium, and high GHG emission scenarios. These values are based on the Intergovernmental Panel on Climate Change emission scenarios as follows: B1 for low projections, A2 for medium projects, and A1F1 for high projections.

The projected values show narrow ranges of rise for the relative short term and increasing ranges for time frames farther into the future. The scenarios predict fairly consistent values in the short term, but increasingly wide ranges of value in the longer term due to increasing uncertainty. These projections vary depending upon how quickly the international community reduces GHG emissions. There is no specific probability of occurrence for any of the projected scenarios—they represent different possible global climate conditions and the amount of projected sea level rise for the respective conditions.

Predicted Consequences of Sea Level Rise on the I-5 NCC Project: Section 3.9 of this Final EIR/EIS discusses lagoon and creek crossing hydrology/hydraulics, including the impacts anticipated during the 100-year flood event and projections of sea level rise for 2100. Preliminary design studies indicate ample freeboard to accommodate the 100-year flood event and projected 2100 sea level rise at all water crossings except Carmel Creek. At that location, there would be a deficiency of 0.7 foot of freeboard during a 100-year flood event. This represents a temporary build up of water east of I-5, however, and freeway access would be anticipated to be maintained.



Application of the Screening Criteria to the I-5 NCC Project: In considering the screening criteria listed above, the project design life is expected to be approximately 40 years (to 2050). I-5 is a critical route for commercial goods movement.

In the (unexpected) event that a tidal event inundates the freeway, there are several alternative routes to I-5 in this area. El Camino Real, less than a mile east of the freeway, is a parallel north-south route. Further east, I-15 is connected to I-5 by several local streets, as well as the SR-56, SR-76, and SR-78 freeways. These facilities could also serve as evacuation routes, if needed. The ITS elements of the existing facility and those proposed as part of the *I-5 NCC Project*, would improve real time responses to emergency situations. The anticipated travel delay from an event would be minor to moderate, lasting from a few hours to possibly a few days.

The addition of a new structure and raising the freeway approaches to the new structure would add millions to the project and ongoing additional maintenance for this area also would be incurred to support the raised approaches to the structure. It would also necessitate reconstructing portions of Carmel Valley Road west and east of the project, Sorrento Valley Road to the west, and possibly reconstructing the connections of El Camino Real and SR-56 to Carmel Valley Road. In addition to the above design and cost consideration, the redesign would increase the project footprint in the Carmel Valley area. The project would likely encroach into the habitat of CVREP to the west and Los Peñasquitos Lagoon to the west. It could also impact existing businesses immediately east of the freeway.

Further delays to implementing the project would cause longer travel times, increase congestion and possibly lead to additional accidents.

Adaptation Strategies

Adaptation strategies to reduce the deficiency include removing existing sediment under the existing bridge at Carmel Valley Creek and temporary freeway closures. Alternative routes exist so that traffic could be rerouted during periods of minor to moderate inundation. Based on the results from the screening criteria discussion, the adaptation strategies are considered appropriate for the risk level identified.

4.7 Mitigation Measures for Significant Impacts under CEQA

Supporting documentation of all CEQA resource evaluation is provided in *Chapter 3* of this Final EIR/EIS. Discussion of all impact avoidance, minimization, and/or compensation measures is under the appropriate topic headings in *Chapter 3*. Implementation of these measures would reduce significant impacts to below a level of significance under CEQA for Cultural Resources, Paleontological Resources, Hazards and Hazardous Materials, Noise, and Biological Resources (including Natural Communities; Wetlands and Other Waters; Plant, Animal, and Threatened and Endangered Species; and Conformance with Local Policies, Ordinances, and Conservation Plans). Significant project-level impacts to community character and cohesion would remain significant for the 10+4 Barrier alternative. Project-level and cumulative impacts to visual resources would remain significant and unmitigable under any of the build alternatives. All other project-related direct and cumulative effects would be reduced to below a level of significance through proposed design minimization, as described in *Chapter 3* and *Section 4.6* above. The avoidance, minimization, and mitigation measures are incorporated into the ECR, which comprises a program for reporting on or monitoring implementation of the measures, pursuant to CEQA Guidelines Section 15091(d).





Chapter 5 – Comments and Coordination

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process. The input and advice helps to determine the scope of environmental documentation, the level of analysis, potential impacts, mitigation measures, and related environmental requirements. Projects as large as the *I-5 NCC Project* benefit from federal, State, and local agency consultation and public participation. This participation has been accomplished through a variety of formal and informal methods, including: scoping meetings, project development team meetings, interagency coordination meetings, public meetings on the Draft and Supplemental Draft environmental documents, a Major Investment Study, and direct coordination with individuals regarding proposed project features as well as potential property impacts. Numerous community meetings with service groups, homeowners associations, and business organizations have helped gain an understanding of the public concerns as the project is developed. This chapter summarizes the results of Caltrans' and FHWA's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

5.1 Project Scoping Process

In 2001, Caltrans held preliminary public scoping meetings, prior to environmental analysis, to introduce the project concept. These preliminary public scoping meetings were held on the following dates and locations:

- March 27, 2001 in Carlsbad
- April 17, 2001 in Encinitas
- May 16, 2001 in Del Mar
- June 21, 2001 in Oceanside

Notice of Intent

On January 12, 2004, a Notice of Intent (NOI) was published in the Federal Register in accordance with NEPA, to advise the public that the environmental document would be prepared and to provide supplementary information about the proposed action and alternatives. Comments and suggestions were invited from all interested parties. The NOI was issued on January 5, 2004, for a 30-day review period. A copy of the NOI is included as *Figure 5-1.1*, below.

Comments on the NOI were received from the following:

- USEPA (concerns focused on establishment of purpose and need; impacts to water resources, biological resources, and air quality; impacts to cultural resources; impacts to environmental justice communities; and analysis of cumulative impacts)
- USFWS (requested in-depth discussion on a range of reasonable project alternatives that avoid or lessen significant effects of the proposed project; address consistency with habitat conservation plans; address edge-effects; address construction and operational noise levels; and discuss BMPs)

The formal scoping meetings were held in 2004 at the following locations:

 January 7, Carlsbad Library - George and Patricia Gowland Meeting Room - 1775 Dove Lane



- January 13, Oceanside High School Multi Purpose Room 100 S. Horn Street
- January 27, Encinitas Community Center Room 142B 1140 Oakcrest Park Drive
- February 10, Solana Beach City Hall Council Chambers 635 South Coast Highway 101
- February 17, Del Mar City Hall Council Chambers Room 1050 Camino Del Mar
- March 2 San Diego Westfield Shopping Town UTC Forum Hall behind Wells Fargo Bank

Notice of Preparation

On October 20, 2004, a Notice of Preparation (NOP) was filed with the State Clearninghouse and San Diego County Clerk, and distributed to appropriate State and local agencies and organizations. The review period for the NOP was from October 20 to December 14, 2004. Copies of the NOP are included as *Figures 5-1.2a* and *5-1.2b*, below.

Comments on the NOP were received from the following:

- USFWS (requested an in-depth alternatives analysis; identification and consideration of listed and sensitive wildlife species and other biological resources within and adjacent to the project area, as well as associated impact avoidance; discussion of the project's consistency with applicable habitat conservation plans; identification and discussion of edge effects and applicable best management practices)
- CCC (requested an in-depth alternatives analysis, specifically other modal alternatives, and to focus on impact avoidance and restoration to sensitive resources)
- California Department of Fish and Wildlife (CDFW; previously California Department of Fish and Game) (requested in-depth discussion on a range of reasonable project alternatives that avoid or lessen significant effects of the proposed project; address consistency with habitat conservation plans; address edge-effects; address construction and operational noise levels; and discuss BMPs)
- City of San Diego Councilman Scott E. Peters (requested examination of alternative routing for the proposed LOSSAN rail expansion project)
- City of San Diego (requested that a waste management plan be prepared for the project prior to demolition or grading in consultation with the City of San Diego Environmental Services Department and consideration of recycled water use for landscaping irrigation)
- City of Del Mar (concerned with wetland and traffic impacts; requested traffic improvements/modifications at various intersections)
- City of Solana Beach (requested analysis of four additional alternatives and study and installation of sound attenuation during environmental review, planning, and design)
- City of Carlsbad (requested notification of the availability of the Draft EIR)
- San Dieguito Lagoon Committee (requested in-depth analysis of wetland, floodway, and floodplain impacts; a mitigation program for potential impacts; and discussion of project alternatives)
- NAHC (requested various actions to identify and mitigate project-related impacts on cultural resources)
- Willow Design, Inc. (proposed a conceptual study of two independent "side-by-side" freeways)
- Faye Detsky-Weil (concerned with increased traffic and decreasing quality of life, lack of transit alternatives, and right-of-way takes)
- Morton Printz (requested an extension of the public comment period)



Additional Project Outreach

Two newsletters were sent out and/or made available to the public. The first edition was mailed directly to more than 100,000 addresses within one mi east or west of the freeway. A postcard was also sent out to the same area informing residents that the second edition of the newsletter, along with additional project information, was available on the project web site at www.keepsandiegomoving.com. The project web site has been frequently updated providing accurate and timely information to anyone who is interested. Additional non-traditional outreach occurred by posting Scoping Meeting flyers in Spanish/English language at various establishments including: libraries, Mexican markets, churches, schools, chambers of commerce, city halls, senior centers, community centers, Boys & Girls Club, Headstart Center. Representatives from the Environmental and Public Information branches also attended Farmers Markets and Food Court locations along the corridor to discuss the project and upcoming scoping meetings with interested freeway users. Please see Section 8.1 Community Outreach, of the Community Impact Assessment for a more thorough list of outreach efforts.

Prior to formal scoping activities described in *Section 5.1*, above, community interaction was sought through informational meetings between December 1997 and January 1998 as part of the North Coast Transportation Study that served as the MIS developed in partnership with SANDAG. After completion of the MIS and the PSR (PDS) in 2000, four informational meetings were held between March and June 2001 in Del Mar, Solana Beach, Carlsbad, and Oceanside. In October 2000, representatives from SANDAG, city staff, and private citizens met with Caltrans project team members to begin the process of identifying opportunities for enhancement features to integrate natural and cultural resources into freeway improvements. Basic functions of the study were identified as intended to "enhance visual characteristics" and "preserve community character." The team developed 71 enhancement strategies to support these functions that were presented to elected officials of each city. As part of community enhancement planning, public input was solicited at the following meetings:

- In San Diego on April 19, 2006 at the Sycamore Ridge School
- In Encinitas on August 23, 2005 at the Paul Ecke Central Elementary School
- In Encinitas on August 24, 2005 at Encinitas City Hall
- In Encinitas on August 25, 2005 at Cardiff Elementary School
- In Carlsbad on May 2, 2006 at the City of Carlsbad
- In Oceanside on June 20, 2006 at the City of Oceanside

Since 2004, Caltrans Project Management for the *I-5 NCC Project* has attended meetings, conducted surveys, presented handouts/mailers, and given presentation to local communities and planning groups; homeowners associations; chambers of commerce; city council meetings; and local politician sponsored meetings in an effort to update interested parties and the public on the status of the project. These meetings allowed communities to review project information on proposed the 10+4 and 8+4 alternatives and provide informal public input.

In 2004, additional project outreach was held on the following dates and locations:

- January 7, 2004 in Carlsbad
- January 13, 2004 in Oceanside
- January 27, 2004 in Encinitas
- February 10, 2004 in Solana Beach
- February 17, 2004 in Del Mar
- March 2, 2004 in San Diego



The following concerns were identified:

- Purpose, need, and location for potential widening
- Private property impacts
- Community cohesiveness
- Traffic, pedestrian, and bicycle
- Noise
- Growth
- Parks and views, including the sewer treatment plant
- Resource impacts: biological resources (including lagoons), air quality, and water quality
- Cumulative impacts

As noted above, meetings were held from January 2005 to October 2006 with Caltrans, SANDAG, and/or council and staff members of the cities to identify development opportunities and constraints for the project as part of the I-5 North Coast Community Enhancement Plan. These meeting were held on:

- February 22, 2005, and January 12, 2006, with the City of San Diego
- January 18, 2005, and October 10, 2006, with the City of Del Mar
- February 4, 2005, and July 6, 2006, with the City of Solana Beach
- February 2, 2005, June 22, 2005, March 21, 2006, and July 10, 2006, with the City of Encinitas
- January 21, 2005, November 22, 2005, January 31, 2006, and July 6, 2006, with the City
 of Carlsbad
- March 2, 2005, May 15, 2006, July 6, 2006, and December 19, 2006, with the City of Oceanside

In addition, monthly traffic working meetings occurred from February 2005 to January 2007 between Caltrans staff, city engineers, and planning personnel.

5.2 Hearings on the Draft and Supplemental Draft EIR/EIS

In 2010, five public hearings were held in the open-house format to present details about the proposed project design, the alternatives being considered, and findings from the environmental studies, as identified in the Draft EIR/EIS prepared for the project. The hearings were held on the following dates and locations:

- July 27, 2010 at the Encinitas Community and Senior Center in Encinitas
- August 3, 2010 at the Westfield University Town Center Forum Hall in San Diego
- August 17, 2010 at the Faraday Center in Carlsbad
- August 24, 2010 at Skyline Elementary School in Solana Beach
- September 9, 2010 at the Oceanside High School Multipurpose Room in Oceanside

Following public circulation and review of the Draft EIR/EIS, numerous comments were received from members of the public and public agency representatives requesting:

- Updates on studies by others regarding North County lagoons that were in draft form or being implemented when the Draft EIR/EIS was released
- Clarification of specific impact and avoidance/minimization/mitigation measures related to lagoons crossed by the I-5 right-of-way



A Supplemental Draft EIR/EIS was prepared and circulated in August through October 2012. The document focused on lagoon bridge optimization studies completed between 2010 and 2012, and refined lagoon bridge design based on those studies. Issues related to regional and community enhancements, water quality and sea level rise review were also refined in the document. A public hearing on that document was held in the open-house format on September 19, 2012 at the Encinitas Community and Senior Center.

Verbal and written comments were submitted at the hearings, and were also received during the public review period of the Draft EIR/EIS (a total of 5,332 comments) and Supplemental EIR/EIS (a total of 337 comments), and are addressed in full in this Final EIR/EIS.

5.3 Project Development Team Meetings

An *I-5 NCC Project* PDT was assembled by Caltrans and FHWA in 2000 to serve as the technical advisory committee and internal decision-making body for the project. The PDT consists of both Caltrans staff representatives from Program Management and the various technical divisions (such as Environmental Planning, Design, Right of Way, etc.), FHWA, and representatives from other interested agencies. The PDT met (and continues to meet) monthly during the course of project development as issues arise requiring technical direction or resolution.

Agencies participating in the PDT include:

- USEPA
- USFWS
- USACE
- NOAA/NMFS
- CDFW
- CCC
- RWQCB
- SANDAG

Caltrans, SANDAG, and the Cities of San Diego, Del Mar, Solana Beach, Encinitas, Carlsbad, and Oceanside also worked closely as partners in the development of the proposed project.

Cooperating Agencies

There is a need for early coordination and cooperation with federal, State, and local agencies. According to CEQ 40 CFR 1508.5, "cooperating agency" means any federal agency, other than a lead agency, that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposed project or project alternative. Upon request of the lead agency, any federal agency with jurisdiction by law shall be a cooperating agency. Any other federal agency with special expertise with respect to any environmental issue may be a cooperating agency. An agency may request to be designated as a cooperating agency. *Table 5.1* below identifies the cooperating agencies coordination, particularly focused on the NEPA-Section 404 Integration Process discussed in more detail in *Section 5.4*.

On April 27, 2004 FHWA invited USEPA, USFWS, USACE, and NOAA/NMFS to become cooperating agencies. On May 20, 2004 USEPA declined invitation to participate as a cooperating agency, since USEPA is participating via the NEPA 404 MOU process (see *Section 5.4*). FHWA received agreement to participate as a cooperating agency from USFWS, USACE, and NOAA/NMFS.



On May 3, 2010 FHWA sent an invitation and subsequently received agreement to participate as a cooperating agency from the U.S. Coast Guard. In a letter dated December 13, 2012 (Figure 5-3.1), the U.S. Coast Guard notified Caltrans that bridges proposed over the following waterways would meet the criteria for Advance Approval of bridges pursuant to 33 CFR 115.70, and no individual Coast Guard permits would be needed for them because these waterways are not navigated by anything larger than small motorboats: San Diego River, Los Peñasquitos Lagoon and River, San Dieguito Lagoon, San Elijo Lagoon, Batiquitos Lagoon, and Agua Hedionda Lagoon. The letter also stated that the I-5 bridge crossings of the following waterways are located on reaches of the waterways considered to be non-navigable and therefore, under the provisions of the Coast Guard Authorization Act of 1982, do not require Coast Guard involvement for bridge permit purposes: Buena Vista Lagoon, San Luis Rey River, Carmel Valley Creek, and Loma Alta Creek.

5.4 NEPA – Section 404 Integration Process

On December 10, 2004, Caltrans signed an interagency MOU committing to integrate NEPA and Section 404 of the Clean Water Act in transportation planning, programming, and implementation stages for federal aid surface transportation projects requiring a Permit under Section 404. Under the MOU process, the FHWA, USFWS, NOAA/NMFS, USACE, and USEPA were asked to concur on the following two checkpoints: (1) Purpose and Need Statement, and (2) identification of the range of alternatives and consideration of the criteria used to select and analyze the range of alternatives to be studied in the EIR/EIS. The Preliminary LEDPA Determination and Conceptual Mitigation Plan were identified as issues to be discussed for concurrence after document circulation.

The consolidation of these processes provide for more timely decision making while improving the overall quality of those decisions. Caltrans coordination efforts included inviting for consultation non-signatory State regulatory agencies: the CDFW, CCC staff, and the RWQCB to implement the MOU. Letters concurring on the project purpose and need, screening criteria, and the range of alternatives under study were received from USFWS, NOAA/NMFS, USACE, and USEPA (*Figures 5-4.1* through *5-4.12*). *Table 5.1* provides the dates of the NEPA/404 meetings held during the project development process.

As anticipated, concurrence regarding the LEDPA Determination and Conceptual Mitigation Plan was the subject of coordination following circulation of the Draft EIR/EIS. Refinement of the 8+4 Buffer alternative (identified as the locally preferred alternative, or LPA, in 2011, and currently identified as the Preferred Alternative) was integral to these discussions. Letters of concurrence on the Preliminary LEDPA and the Conceptual Mitigation Plan (Resource Enhancement and Mitigation Program [REMP]) were received from USFWS, NOAA/NMFS, USACE, and USEPA (*Figures 5-4.13* through *5-4.16*) on the dates indicated in *Table 5.1*. Coordination efforts related to lagoon bridge optimization studies and resolution of project-related issues between November 2010 and release of this Final EIR/EIS are included in *Table 5.1*.



Table 5.1: NFPA/404 Consultation and Coordination

	A/404 Consultation and Coordination
Date	Topic(s)
11/12/2003	Kickoff Meeting
03/03/2004	Meeting discussed: Purpose and Need
04/20/2004	Meeting discussed: Purpose and Need, Criteria for Alternative Selection, and Project Alternatives
05/20/2004	Received USEPA letter that declined FHWA's invitation to participate as a cooperating agency, since USEPA is participating via the NEPA 404 MOU process
07/28/2004	Meeting discussed: Purpose and Need, Criteria for Alternative Selection, Project Alternatives, Lagoon Restoration, and list of proposed projects with independent utility and logical termini (I-5 / SR-56 and I-5 / Lomas Santa Fe Drive)
09/28/2004	Meeting discussed: Purpose and Need, Criteria for Alternative Selection, and Project Alternatives
11/02/2004	Meeting discussed: Purpose and Need, Criteria for Alternative Selection, and Project Alternatives
December and January 2005	Concurrence with Purpose and Need: USACE 1/19/2005; USEPA 1/10/2004[sic]; USFWS 1/3/2005; NOAA 12/17/2004
01/20/2005	Field Review. Purpose and Need, Criteria for Alternative Selection, and Project Alternatives
03/23/2005	Meeting discussed: Purpose and Need, Criteria for Alternative Selection, Project Alternatives, and Biological resources
04/27/2005	Meeting discussed: Purpose and Need, Criteria for Alternative Selection, Project Alternatives, Lagoon Restoration for mitigation plan and Proposed projects with independent utility and logical termini (I-5 HOV Extension and I-5 / Genesee Avenue Interchange projects)
May and June 2005	Concurrence with Screening Criteria: USACE 6/29/2005; USFWS 5/25/2005; USEPA 5/23/2005; NOAA 5/19/2005
09/13/2005	Meeting discussed: Purpose and Need, Criteria for Alternative Selection, Project Alternatives, Lagoon Restoration for mitigation plan
October 2005	Concurrence with I-5 / Genesee Avenue Interchange Improvements Project as independent from the <i>I-5 NCC Project</i> . USFWS 11/1/2005; USACE 10/26/2005; USEPA 10/26/2005; NOAA 10/21/2005
11/15/2005	Meeting discussed: Purpose and Need, Criteria for Alternative Selection, Project Alternatives, Lagoon Restoration for mitigation plan
11/15/2005	Meeting discussed: Purpose and Need, Criteria for Alternative Selection, Project Alternatives, Lagoon Restoration for mitigation plan
01/19/2006	Meeting discussed: Lagoon Restoration and Coastal Habitat
03/30/2006	Meeting discussed: Lagoon restoration, Opportunities and Constraints for future community enhancements
06/06/2006	Meeting discussed: Purpose and Need, Criteria for Alternative Selection, Project Alternatives, Lagoon Restoration for mitigation plan and Proposed projects
08/01/2006	Meeting discussed: Geotechnical investigation, Coastal access, and lagoon restoration
August 2006	Concurrence with Range of Alternatives: USEPA (not dated); USFWS 8/24/2006; USACE 8/21/2006; NOAA 8/7/2006
09/21/2006	Meeting discussed: San Diego Bay National Wildlife Refuge Comprehensive Conservation Plan - Habitat Enhancement and Restoration Proposals
06/06/2007	Meeting discussed: Lagoon restoration, proposed projects with independent utility and logical termini (I-805 DAR with HOV Extension), and CMIA discussion
July 2007	Concurrence with I-805 DAR with HOV Extension as independent from the <i>I-5 NCC Project</i> , NOAA 7/10/07; USFWS 6/6/2007; Verbal at meeting 5/22/08 USEPA and USACE



Table 5.1 (cont.): NEPA/404 Consultation and Coordination

Date	Topic(s)
	Meeting discussed: I-5 NCC Project status, status of other projects along I-5,
05/22/2008	coordination with mass transit and not to preclude LOSSAN, lagoons, and wildlife
	corridors
09/23/2010	Field review of the North Coast Corridor by Caltrans and EPA staff
	Dr. Michael Josselyn presented a summary of findings based on Phase 2 lagoon
	bridge optimization studies (Wetland Enhancement Opportunities Using the
10/28/2010	Hydrodynamic Approach by Optimization of Bridges Over San Diego Region
	Coastal Lagoons). Caltrans provided an update on the project and NEPA/404
	Memorandum of Understanding (MOU) process
11/23/2010	Caltrans and EPA coordination regarding the Draft EIR/EIS
12/07/2010	Caltrans and EPA additional coordination regarding the Draft EIR/EIS
	Caltrans provided updates on the NEPA/404 MOU process and project Public
04/06/0044	Works Plan (PWP), and an overview of the Regional Transportation Plan (RTP).
01/26/2011	Discussion of the project Mitigation Plan. Caltrans requested concurrence on details
	of Encinitas Boulevard interchange improvements
02/20/2011	Discussion regarding scope of Supplemental Draft EIR/EIS (SDEIR/EIS) and the
03/30/2011	locally preferred alternative (LPA)
	Caltrans provided an update on the NEPA/404 MOU process and PWP, as well as
04/27/2011	an overview of the RTP. Discussion of the Mitigation Plan. Caltrans requested
	concurrence on details of the Encinitas Boulevard interchange improvements
	Concurrence reached on I-5/Encinitas Boulevard interchange improvements;
	update on NEPA/404 MOU process. Review of I-5 bridges, mitigation summary
06/01/2011	table information for 10+4 w/barrier and 8+4 w/buffer design alternatives, and a
	sample format for lagoon bridge summary analysis (using Agua Hedionda Lagoon
	Bridge). Discussion of the outline for the SDEIR/EIS
07/06/2011	Discussion of the LPA, project direct access ramps (DARs), and construction
07/06/2011	phasing
08/11/2011	Caltrans provided updates on optimization studies for the six lagoons, as well as the
00/11/2011	SDEIR/EIS and LPA refinement
	Agua Hedionda Lagoon discussion with focus on lagoon bridge summary matrix
09/15/2011	with justification for bridge lengths, and request for concurrence. Discussion of
00/10/2011	trails and opportunities at Agua Hedionda. Caltrans provided updates on lagoon
	bridge optimization studies and on the SDEIR/EIS
	Review of other ongoing projects. Updates provided for I-5 / Genesee, I-5 / SR-56,
	and I-5 / Encinitas interchanges, the SDEIR/EIS, and bridge length optimization
11/09/2011	studies at the lagoons. Review of a mitigation site assessment template using the
11/00/2011	Hallmark property. Concurrence/approval received on the Agua Hedionda lagoon
	bridge matrix and justification paper. Presentation of Los Peñasquitos and San
	Dieguito bridge justification papers and matrices
	Review of mitigation site assessment template for Hallmark and La Costa
12/15/2011	properties, as well as bridge justification papers and matrices for San Dieguito, Los
	Peñasquitos, and Agua Hedionda Lagoons
01/19/2012	Review of SDEIR/EIS Chapter 1
	Review of SDEIR/EIS outline and revised project analysis key (summarizing agency
02/16/2012	comments and documents which address the response). Discussion of agency
02/10/2012	comments on SDEIR/EIS Chapter 1. Presentation of I-5 North Coast Bikeway
	concept and discussion of Carmel Creek field trip
02/29/2012	Caltrans and USEPA coordination regarding topics to be covered in the SDEIR/EIS
04/12/2012	Agencies provided comments on the SDEIR/EIS and team discussion of document
	content continued
July 2013	Caltrans and USACE coordination regarding LEDPA and USACE permit
05/24/2012	Review of project mitigation package and mitigation parcel evaluations



Table 5.1 (cont.): N	IEPA/404 Consultation and	Coordination
----------------------	---------------------------	--------------

Date	Topic(s)s
06/21/2012	Continued discussion of Resource Enhancement Program (REP)**/project
	mitigation package, introduction of Draft Design Guidelines
07/19/2012	Continued discussion of REP**/project mitigation package
09/20/2012	Discussion of REP** elements, timing and funding, and identification of preliminary LEDPA
	RWCQB, USACE, SANDAG, and Caltrans discussion regarding USACE permitting
09/27/2012	process and mitigation. Consensus reached on use of a programmatic individual
	permit and banking agreement.
10/09/2012	Agency review of comments on SED
10/18/2012	REP** mitigation detail and discussion of Draft Design Guidelines
12/06/2012	Ongoing PWP/TREP development to support CCC permitting process, REP**
12/06/2012	discussion of temporary impacts, performance standards, and endowments
01/24/2013	Review of REP** comments, initiation of LEDPA and REP** concurrence
01/24/2013	discussions.
02/28/2013	Continued discussion of REP** comments
03/28/2013	Continued discussion of REP** comments
04/18/2013	Continued discussion of REP** comments and Draft Final EIR/EIS
04/29/2013	Caltrans requested concurrence on the Preliminary LEDPA and the REMP
June 2013	Final review and coordination on the REMP
May-July	Concurrence received on Preliminary LEDPA and REMP: NOAA/NMFS
2013	05/28/2013; USEPA 06/10/2013; USFWS 06/18/2013; USACE 07/15/2013;

^{*} Unless otherwise specified, each meeting was attended by staff from each of the following agencies: USACE, CCC, CDFW, USEPA, NOAA/NMFS, RWQCB, SANDAG, and USFWS.

5.5 Additional Consultation and Coordination with Public Agencies

As indicated in *Sections 5.1* through *5.4*, considerable coordination has occurred with both public resource and regulatory agencies throughout the environmental review process beginning in 2001. FHWA and Caltrans have worked closely with representatives of various federal, State, regional, and local agencies. The agencies were formally or informally contacted and consulted during the preparation of the environmental analysis.

Since 2007, SANDAG and Caltrans, in coordination with CCC staff, have met bi-monthly to advance the PWP/TREP. The PWP/TREP meetings were designed to continue the process that would maintain and improve transportation facilities within the I-5 North Coast Corridor and address coastal resource impacts on a project-by-project basis. The PWP/TREP provides a planning, analytical, and implementation mechanism to address improvements throughout the corridor as a system consistent with the policies of the Coastal Act. A CCC staff member was assigned full-time for this project and has attended the bi-monthly PWP/TREP meetings.

Stakeholder Outreach and Coordination

Initial opportunities and constraints meetings with city staff are discussed above under the heading "Additional Project Outreach" in Section 5.1. In addition to meetings with city staff and elected officials, meetings have also occurred with other North Coast Corridor stakeholder groups, including but not limited to lagoon foundations, community planning groups, chambers of commerce, members of the public, and local school districts. A series of stakeholder meetings were held relating to community enhancements to provide project information, address project status, and obtain specific input on issues under their purview. Following

^{**} The REP is now referred to as the Resource Enhancement and Mitigation Program (REMP)



circulation of the Draft EIR/EIS in 2010, additional input was received from stakeholders (see Appendix H of this Final EIR/EIS), and coordination regarding additional project refinement was reinitiated. These meetings are summarized in *Table 5.2*.

Table 5.2: Stakeholder Outreach and Coordination

Date	Organization	Topic(s) and/or Purpose of Meeting
12/05/2005	City of Carlsbad, Lennar Corporation, SDG&E	Cannon Road DAR
12/16/2005	Batiquitos Lagoon Foundation	Opportunities and Constraints Analysis – discuss community enhancement projects around Batiquitos Lagoon
01/26/2006	San Dieguito Park Joint Powers Authority	Conceptual community enhancement projects proposed for City of San Diego
01/27/2006	City of San Diego – Parks and Rec Department, Torrey Pines State Reserve	Conceptual community enhancement projects proposed for City of San Diego
02/03/2006	City of San Diego Trails Manager	Discuss potential trail connections
02/14/2006	Agua Hedionda Lagoon Foundation, Carlsbad Watershed Alliance	Opportunities and Constraints Analysis – discuss community enhancement projects around Agua Hedionda Lagoon and Batiquitos Lagoon
02/14/2006	Carmel Valley Community Planning Group	Conceptual community enhancement projects proposed for City of San Diego
02/21/2006	Torrey Hills Community Planning Group	Conceptual community enhancement projects proposed for City of San Diego
03/09/2006	Torrey Pines Community Planning Group	Conceptual community enhancement projects proposed for City of San Diego
03/21/2006	City of Carlsbad Council Members	Conceptual community enhancement projects proposed for City of Carlsbad
03/29/2006	Agua Hedionda Lagoon Foundation	Opportunities and Constraints Analysis – discuss community enhancement projects around Agua Hedionda Lagoon
06/07/2006	City of Oceanside, Oceanside High School, Oceanside Superintendant of Schools	Opportunities and Constraints Analysis – discuss community enhancements at Mission Avenue near Oceanside High School
04/22/2011	Quarterly Stakeholders Group	Meeting with NCC stakeholders
05/06/2011	Equinox Center Symposium	I-5 debate between Senator Kehoe and Laurie Berman of Caltrans
06/24/2011	Quarterly Stakeholders Group	Meeting with NCC stakeholders
09/13/2011	San Diego Regional Chamber of Commerce	Presentation to the Public Policy Committee
10/17/2011	City of San Diego, District 1	Team briefed councilmember on I-5 / Genesee interchange project, as well as NCC program
10/25/2011	Carlsbad Chamber of Commerce	Presentation to Land Use and Transportation Committee
11/01/2011	California Coastal Commission	Briefing with executive director
11/01/2011	California Coastal Commission	Presentation to Road's Edge Subcommittee



Table 5.2 (cont.): Stakeholder Outreach and Coordination

Date	Organization	Topic(s) and/or Purpose of Meeting
11/07/2011	Caltrans	Briefing with director on upcoming coastal permit process and role of outreach
11/17/2011	Leadership North County	Presentation to Land Use and Transportation Committee
12/01/2011	Oceanside Chamber of Commerce	Presentation to the Public Policy Committee
01/05/2012	San Diego North Economic Development Council	Meeting with Public Policy Committee
01/10/2012	Batiquitos Lagoon Foundation	Meeting with Foundation president to discuss NCC status and next steps
01/10/2012	San Dieguito River Park	Meeting with deputy director to discuss NCC status and next steps
01/12/2012	Golden Triangle Transportation Forum	Presentation made to forum participants about ongoing and proposed transportation projects in the area
01/13/2012	San Elijo Lagoon Conservancy	Briefing with Conservancy executive director about NCC status/next steps
01/19/2012	California State Assembly, District 74	Briefing with assembly member about NCC program
01/25/2012	California Senate, 39th District	Briefing with policy director of Senator Kehoe's office
01/30/2012	Prevent Los Angeles Gridlock Usurping the Environment (PLAGUE)	Briefing on NCC status/next steps
02/01/2012	California State Assembly, District 74	Materials requested during 1/19/2012 meeting with District 74 assembly member were provided
02/02/2012	Los Peñasquitos Lagoon Foundation	Meeting with California State Parks (lagoon stakeholder) and Foundation representative
02/03/2012	San Dieguito River Park	Briefing with executive director and the Citizens Advisory Committee on NCC status/next steps
02/07/2012	Agua Hedionda Lagoon Foundation	Presentation to executive director and the Board of Directors on NCC status/next steps
02/14/2012	City of San Diego, staff	Meeting regarding local coastal plan (LCP) process
02/15/2012	City of Oceanside, staff	Meeting regarding LCP process
02/15/2012	City of Del Mar, planning staff	Meeting with City planning manager regarding LCP process
02/17/2012	San Dieguito River Park	Briefing to Joint Powers Authority Board about NCC status/next steps
03/07/2012	California Coastal Commission	Presentation to the CCC about NCC status/next steps
04/04/2012	Buena Vista Lagoon Foundation	Briefing with Foundation executive director and president about NCC status/next steps
10/23/2012	Del Mar Hills Academy	Briefing with Superintendent, Assistant Superintendent, and school Principal on NCC status/next steps
11/15/2012	North County Bicycle Committees	Discussion of I-5 NC Bike Trail
03/28/2013	San Dieguito River Park	Discussion with Joint Powers Authority regarding connection to the NC Bike Trail connection
04/03/2013	CDFW, County of San Diego and San Elijo Lagoon Conservancy	Section 4(f) concurrence discussion
08/01/2013	County of San Diego	Section 4(f) concurrence discussion on San Elijo



Concurrence with Proposed Section 4(f) De Minimis Use

Section 6009(a) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU) amends existing Section 4(f) legislation to allow the USDOT to determine that certain uses of a Section 4(f) land would have no adverse effect on the protected resource. Such de minimis impacts on publicly owned parks; recreational areas of national, State, or local significance; wildlife or waterfowl refuges; or lands from an historic site of national, State, or local significance are defined as those that do not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) (49 USC 303[d]; 23 USC 138[d]). When FHWA proposes to make a de minimis impact finding, it must provide an opportunity for public comment on the proposed finding (included in the public comment period for the I-5 NCC Project Draft EIR/EIS). In addition, the official(s) with jurisdiction over the Section 4(f) resource in question must: a) with regard to historic properties, concur, in writing, with FHWA's proposed finding of 'no adverse effect' or 'no historic properties affected' in accordance with 36 CFR part 800; or b) in the case of parks, recreation areas, and wildlife and waterfowl refuges, concur in writing that the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection (23 CFR § 774.5[b]). To comply with Section 6009(a), FHWA and Caltrans are coordinating with the SHPO, who has jurisdiction over the two historic Built Environment 4(f) resources, and informed them that the proposed project's use of the 4(f) resource is being considered for a de minimis finding. Two of these historic properties would not be adversely affected. The Section 4(f) resources are summarized in Section 3.1.3 and Section 3.8, and detailed in Appendix A.

The PDT was assembled by Caltrans and FHWA in 2000 to serve as the technical advisory committee and internal decision-making body for the project. This monthly PDT consists of Caltrans staff, Caltrans staff on behalf of FHWA, and representatives from other public agencies including USFWS, USACE, NOAA/NMFS, CDFW, RWQCB, CCC, SHPO, NAHC, Camp Pendleton, and the Cities of San Diego, Del Mar, Solana Beach, Encinitas, Carlsbad, and Oceanside. FHWA and Caltrans have undertaken extensive efforts to integrate the proposed project with the adjacent/adjoining cities. There were several community meetings held within the project area, as well as formal and informal consultations with the cities and jurisdictions. Coordination occurred within these meetings throughout the development of the project that informed officials with jurisdiction over a specific resource that potential use of the resource is proposed. The proposed de minimis determinations were prepared in consultation with the agencies having jurisdiction over the resources and centered on a) significance of the property, b) primary purpose of the land, c) proposed use and impacts, and d) proposed measures to avoid and/or minimize harm. Efforts between FHWA, Caltrans, and these cities to work cooperatively and to avoid conflicts with State transportation facilities are ongoing. Written concurrence has been received from various officials that the project is either exempt from Section 4(f) or would not adversely affect properties proposed for a de minimis impact finding. as summarized below.

- For the San Dieguito River Park, Caltrans received an email on May 22, 2013 noting that the SDRP administrator (the JPA) concurs that the "impact" associated with connecting the trails would be beneficial in nature and is therefore exempt from Section 4(f) per 23 CFR 744.13(g) (Figure 5-5.1).
- For the San Elijo Lagoon Ecological Reserve, concurrence in a Section 4(f) *de minimis* finding was received from the CDFW on August 30, 2013, from the County of San Diego on September 10, 2013, and from the San Elijo Lagoon Conservancy on August 12, 2013 (*Figures 5-5.2* through *5-5.4*).



• For Agua Hedionda Lagoon, concurrence in a Section 4(f) *de minimis* finding was received from the City of Carlsbad on May 06, 2013 (*Figure 5-5.5*).

Other communication regarding park and recreational properties includes the following:

- For Oak Park, an email received from the City of Carlsbad on February 21, 2013 concurs that this facility is considered a Special Use Area, without significant recreational use.
- For Pio Pico Park, an email received from the City of Carlsbad on February 21, 2013 concurs that this facility is considered a Special Use Area, without significant recreational use.
- For Cottonwood Creek Park, an email received from the City of Encinitas on March 8, 2013 concurs that the impacts are temporary occupancy of the land and exempt as defined by 23 CFR 774.13(d).
- For Paul Ecke Park, an email received from the City of Encinitas on September 16, 2013 concurs that the impacts would be temporary occupancy of the land and exempt as defined by 23 CFR 774.13(d).

State Historic Preservation Officer Coordination (SHPO)

As required by federal and State law, an agency must take into account how its undertaking may affect historic properties/historical resources listed in or eligible for listing in the NRHP and the CRHR. The SHPO is the primary consulting agency that FHWA and Caltrans must coordinate with for concurrence determinations on eligibility and project effects to eligible resources. The HPSR is submitted to the SHPO to: (1) document the Native American consultation efforts; (2) identify cultural resources within a project's APE; (3) seek its concurrence with NRHP and CRHR eligibility determinations; (4) identify project effects to eligible resources; and (5) propose methods to resolve adverse effects to eligible resources. SHPO consultation and coordination is summarized in *Table 5.3*.

Table 5.3: SHPO Consultation and Coordination

Date	Topic(s)
03/16/2007	Caltrans submits HPSR and technical studies to SHPO for review and concurrence with eligibility determinations
04/29/2007	SHPO requests 30-day extension to complete HPSR review
07/02/2007	No SHPO response; Caltrans notifies SHPO it is moving forward in the Section 106 process
12/04/2007	Caltrans submits FOE document to FHWA for review
12/27/2007	FHWA concurs in FOE findings and forwards document to SHPO for its review
03/17/2008	SHPO comments on FOE findings (see Figure 5-5.6)
04/14/2010	Caltrans submits Notification of No Adverse Effects with Standard Conditions-(ESAs) to SHPO
05/12/2010	SHPO agrees that No Adverse Effects with Standard Conditions (i.e., ESAs) would suitably protect archaeological sites for biological mitigation activities (see <i>Figure 5-5.7</i>)
07/01/2013	Caltrans notifies FHWA of APE revisions and requests FHWA to consult with SHPO (see Figure 5-5.8)
07/12/2013	FHWA notifies SHPO of APE revisions and requests SHPO concurrence with Finding of No Adverse Effect (see <i>Figure 5-5.9</i>)
09/11/2013	SHPO concurs with Finding of No Adverse Effect without standard conditions (see Figure 5-5.10)



U.S. Fish and Wildlife Service

Early coordination with the USFWS took place in order to determine sensitive species within the project area. The USFWS provided this information regarding listed endangered, threatened, and proposed species within the area in letters dated January 26, 2005 and November 13, 2007 (see *Figure 5-5.11*), and confirmed continued accuracy of the listing during September 23, 2013 coordination with Sally Brown of the USFWS. The USFWS also provided a Biological Opinion for the *I-5 NCC Project*, dated December 31, 2012, which reviews the project's effects on federally listed species and critical habitat in accordance with Section 7 of the Endangered Species Act of 1973, and also summarizes the extensive coordination between Caltrans and the USFWS (see Appendix O).

Native American Heritage Commission and Native American Coordination

Consultation with NAHC, and appropriate tribes, and Native American individuals has been ongoing since the earliest days of the project dating back to 2002, when the first archaeological survey for the project was undertaken (*Table 5.4*). Consultation would continue until all project-related activities have been completed.

Table 5.4: NAHC and Native American Consultation and Coordination

Date	Topic(s)
2002 through 2006	Native American tribes contacted to provide monitors for archaeological test excavations; monitors present during all subsurface excavation efforts
11/02/2004	NAHC reply; sacred lands search is negative; a list of contacts is provided
08/05/2005	Manzanita Band of the Kumeyaay Nation contacts Caltrans; requests monitors be present during any subsurface investigations
11/14/2005	Caltrans requests an updated list of appropriate Native American groups/individuals in the project region
11/20/2005	Kwaaymii/Laguna band monitors Carmen Lucas sends CA-SDI-16639 letter and photographs from monitoring effort
12/04/2005	Kumeyaay Monitor Clint Linton sent letter documenting monitoring effort for site CA-SDI-4553
12/18/2005	Kwaaymii/Laguna band monitors Carmen Lucas sends CA-SDI-12121 letter and photographs from monitoring effort
01/13/2006	Letters sent to tribes/individuals identified by NAHC seeking their input on information regarding cultural issues within the project's footprint
01/20/2006	Pala Band of Mission Indians replies; informs Caltrans project is outside their traditional territory
01/26/2006	Native American Cultural Resource Consultation replies; requests Native American monitors be present during construction
03/12/2006	Soboba Band of Mission Indians replies; suggests consultation with other Luiseño tribes closer to the project area
07/27/2006	Caltrans meets with Mel Vernon a Luiseño Educator and Ruth Calac a Luiseño, to discuss project, avoidance procedures, and the interpretive display at the scenic overlook
09/22/2006	Kwaaymii/Laguna Band of Indians sends Caltrans Native American monitor report for CA-SDI-17928
12/14/2006	Caltrans letter to KCRC; request a meeting to arrange for repatriation of one human bone from archaeological site CA-SDI-17928
01/12/2007	Human bone repatriated to KCRC
03/14/2007	Caltrans met with Kwaaymii and KCRC; field visit to CA-SDI-17928



Table 5.4 (cont.): NAHC and Native American Consultation and Coordination

•	nt.): NAHC and Native American Consultation and Coordination
Date	Topic(s)
05/23/2007	Kwaaymii representative approves soundwall for portion of CA-SDI-12670 to be adversely affected
05/24/2007	Caltrans contacts NAHC for MLD for CA-SDI-12670 if soundwall is constructed there
06/25/2008	Letter from Advisory Council on Historic Preservation (ACHP) in response to undertaking
00/20/2000	notification declining to participate in Section 106 process (see Figure 5-5.12)
08/07/2008	Caltrans meets KCRC to present Archaeological Treatment Plans for CA-SDI-12670 and CA-SDI-17928
	Caltrans contacts Carmen Lucas (Kwaaymii/Laguna) regarding notification that Caltrans changed the CA-SDI-7296 effect finding from No Adverse Effect with Standard Conditions (ESA) to No Historic Properties Affected since the original justification was based on an error of fact. Archaeological and Native American monitors would be present during planting activities at this biological mitigation parcel.
01/17/2013	Caltrans also informs her that Caltrans would not build two proposed soundwalls. With these changes, site CA-SDI-12670 would be avoided and site CA-SDI-17928 would be excluded from this undertaking, resulting in the project's Finding of Effect revision to No Adverse Effects-Standard Conditions (ESA). Because adverse effects to these resources would be avoided, an MOA would not be required for this undertaking because all impacts to National Register eligible sites would be avoided. Furthermore, the 2007 FOE is no longer applicable to this project.
01/17/2013, 01/24/2013, 03/06/2013, 03/19/2013	Caltrans left messages for Clint Linton (Kumeyaay), to inform him regarding an update on CA-SDI-7296 effect finding (see above contact topic dated 01/17/2013 with Carmen Lucas).
01/17/2013	Caltrans contacts Mel Vernon (Luiseño), updating him of changes to the <i>I-5 NCC Project</i> as a result of two soundwalls not being constructed (see above contact topic dated 01/17/2013 with Carmen Lucas).
03/21/2013	Caltrans contacts Clint Linton (Kumeyaay) to update him on CAS-SDI-7296 effect finding (see above contact topic) and changes to the <i>I-5 NCC Project</i> as a result of two soundwalls not being constructed (see above contact topic dated 01/17/2013 with Carmen Lucas).
01/17/2013, 01/24/2013	Caltrans left messages for Steve Banegas (KCRC).
03/06/2013	Steve Banegas (Kumeyaay/KCRC) referred Caltrans to contact Bernice Paipa (Kumeyaay/KCRC) in his place.
03/06/2013, 03/07/2013, 03/19/2013	Caltrans left messages for Bernice Paipa (Kumeyaay/KCRC).
01/17/2013, 01/24/2013	Caltrans left messages for Merri Lopez-Keifer (San Luis Rey Band of Mission Indians).
03/06/2013	Caltrans contacts Merri Lopez-Keifer (San Luis Rey Band of Mission Indians) to update her of changes to the <i>I-5 NCC Project</i> as a result of two soundwalls not being constructed (see above contact topic dated 01/17/2013 with Carmen Lucas).
01/17/2013, 01/24/2013, 03/06/2013	Caltrans left messages for Carmen Mojado and Cami Mojado (San Luis Rey Band of Mission Indians.)
03/19/13	Caltrans contacts Cami Mojado (San Luis Rey Band of Mission Indians) to update her on changes to the <i>I-5 NCC Project</i> as a result of two soundwalls not being constructed (see above contact topic dated 01/17/2013 with Carmen Lucas).



[4910-22]

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

ENVIRONMENTAL IMPACT STATEMENT: SAN DIEGO COUNTY, CALIFORNIA

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of Intent

SUMMARY: The FHWA is issuing this notice to advise the public that an environmental impact statement will be prepared for a proposed highway project in San Diego County, California.

FOR FURTHER INFORMATION CONTACT: Cesar Perez, South Region Team Leader, Federal Highway Administration, 650 Capitol Mall Suite 4-100, Sacramento, California 95814, Telephone: (916) 498-5065.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the California Department of Transportation will prepare an environmental impact statement (EIS) on a proposal to improve Interstate 5 (I-5) in San Diego County, California. The proposed improvement would involve the addition of high occupancy vehicle (HOV) lanes/Managed Lanes and general purpose lanes to existing I-5 from the City of San Diego to the City of Oceanside for a distance of approximately 28 miles.

Improvements to the corridor are considered necessary to provide for the existing and projected traffic demand. Also, included in this proposal are the addition of auxiliary lanes, direct access ramps (DARs), and interchange improvements where needed. Alternatives under consideration include (1) taking no action; (2) adding two HOV lanes in each direction plus one general purpose lane in each direction. Incorporated into and studied with the build alternative will be design variations at the six lagoons along the corridor. Alternatives associated with those areas will include (1) retaining walls within existing fill slopes; (2) widening on existing fill slopes; (3) removing existing fill in lagoons and bridging the lagoons; (4) elevated HOV lanes on an independent structure.

Letters describing the proposed action and soliciting comments will be sent to appropriate Federal, State, and local agencies, and to private organizations and citizens who have previously expressed or are known to have interest in this proposal. A series of public scoping meetings will be held in each city along the north coast I-5 corridor between January and February 2003. Public notice will be provided indicating the time and place of the scoping meetings.

To ensure that the full range of issues related to this proposed action are addressed and all significant issues identified, comments, and suggestions are invited from all interested parties. Comments or questions concerning this proposed action and the EIS should be directed to the FHWA at the address provided above.

Figure 5-1.1: Notice of Intent



2 (Catalog of Federal Domestic Assistance Program Number 20,205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.) Issued on: January 5, 2004 /s/ Cesar E. Perez Cesar E. Perez South Region Team Leader

Figure 5-1.1 (cont.): Notice of Intent



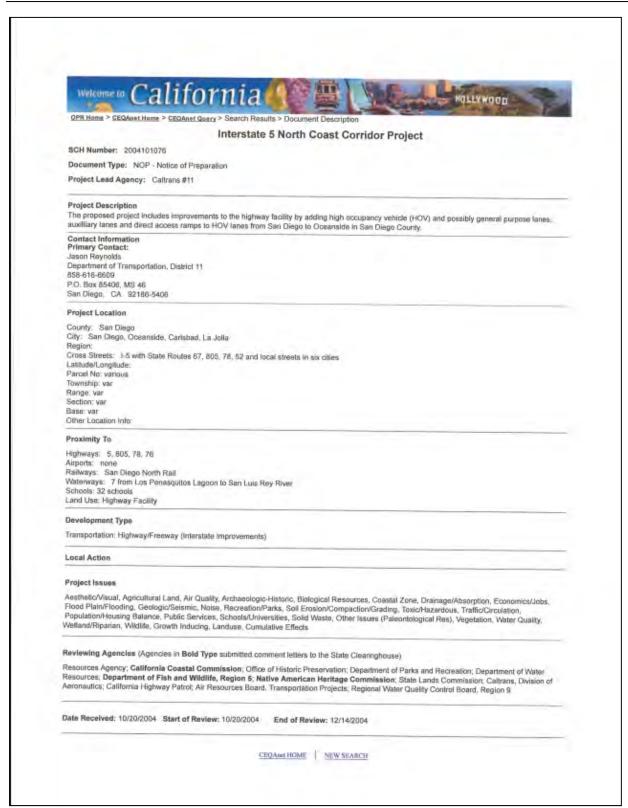


Figure 5-1.2a: Notice of Preparation to State Clearinghouse



	SCH NO.
NOTICE OF PREPARATION	
Fo: County Clerk County Administration Center	From: California Dept. of Transportation
1600 Pacific Highway, Room 260	District 11
San Diego CA 92101	2829 Juan Street San Diego, CA 92110
Reference: California Code of Regulat 15375.	Draft Environmental Impact Report tions, Title 14, (CEQA Guidelines) Sections 15082(a), 15103,
Project Title: North Coast Interstate 5 Co	orridor Project
Project Location: On Interstate 5 from La J Vandegrift Boulevard in Oceanside, California Blyd to the Interstate 5/Interstate 805 merge.	Jolla Village Drive in San Diego north along I-5 to a and on Interstate 805 from just north of Mira Mesa
	dd birth gogunganau yshigla (HOVA langa in occh
Project Description: Caltrans proposes to ac	dd high occupancy vehicle (HOV) lanes in each
direction along the corridor. One general pure	pose lane in each direction may also be added from
direction along the corridor. One general purpose the Del Mar Heights Road to State Route 78. The	pose lane in each direction may also be added from e project would also include interchange
direction along the corridor. One general pury Del Mar Heights Road to State Route 78. The improvements and auxiliary lanes where need	pose lane in each direction may also be added from
direction along the corridor. One general purp Del Mar Heights Road to State Route 78. The improvements and auxiliary lanes where need (DARs) to allow transit vehicles and carpooler This is to inform you that the California Depar Federal Highway Administration will be the least	pose lane in each direction may also be added from e project would also include interchange ded and approximately five direct access ramps as a transition point into the designated HOV lanes. Interchange ded and approximately five direct access ramps are a transition point into the designated HOV lanes.
direction along the corridor. One general purp Del Mar Heights Road to State Route 78. The improvements and auxiliary lanes where need (DARs) to allow transit vehicles and carpooler. This is to inform you that the California Depar Federal Highway Administration will be the less impact report/statement (EIR/EIS) for the proj as a responsible agency is requested in the purp was need to know the views of your agency as	pose lane in each direction may also be added from e project would also include interchange ded and approximately five direct access ramps as a transition point into the designated HOV lanes. Interchange ded and approximately five direct access ramps as a transition point into the designated HOV lanes. Interchange described within the cooperation with the ad agency and will prepare an environmental ject described within this notice. Your participation preparation and review of this document. In the scope and content of the environmental statutory responsibilities in connection with the use the EIR prepared by our agency when
direction along the corridor. One general purp Del Mar Heights Road to State Route 78. The improvements and auxiliary lanes where need (DARs) to allow transit vehicles and carpooler. This is to inform you that the California Depar Federal Highway Administration will be the learn impact report/statement (EIR/EIS) for the proj as a responsible agency is requested in the purp We need to know the views of your agency is information that is germane to your agency's proposed project. Your agency will need to use considering your permit or other approval actives.	pose lane in each direction may also be added from e project would also include interchange ded and approximately five direct access ramps as a transition point into the designated HOV lanes. Interchange ded and approximately five direct access ramps as a transition point into the designated HOV lanes. Interchange described within the cooperation with the ad agency and will prepare an environmental ject described within this notice. Your participation preparation and review of this document. In the scope and content of the environmental statutory responsibilities in connection with the use the EIR prepared by our agency when
direction along the corridor. One general purp Del Mar Heights Road to State Route 78. The improvements and auxiliary lanes where need (DARs) to allow transit vehicles and carpooler. This is to inform you that the California Depar Federal Highway Administration will be the lest impact report/statement (EIR/EIS) for the projas a responsible agency is requested in the purp We need to know the views of your agency as information that is germane to your agency's proposed project. Your agency will need to use considering your permit or other approval actions.	pose lane in each direction may also be added from e project would also include interchange ded and approximately five direct access ramps as a transition point into the designated HOV lanes. Interest of Transportation in cooperation with the ad agency and will prepare an environmental ject described within this notice. Your participation preparation and review of this document. It is to the scope and content of the environmental statutory responsibilities in connection with the use the EIR prepared by our agency when it is in the project. In map, and the potential environmental effects are
direction along the corridor. One general purp Del Mar Heights Road to State Route 78. The improvements and auxiliary lanes where need (DARs) to allow transit vehicles and carpoole! This is to inform you that the California Depar Federal Highway Administration will be the lesimpact report/statement (EIR/EIS) for the proj as a responsible agency is requested in the power of the ending of the project of the p	pose lane in each direction may also be added from e project would also include interchange ded and approximately five direct access ramps as a transition point into the designated HOV lanes. Intermet of Transportation in cooperation with the ad agency and will prepare an environmental ject described within this notice. Your participation preparation and review of this document. Is to the scope and content of the environmental statutory responsibilities in connection with the use the EIR prepared by our agency when clons for the project. Imap, and the potential environmental effects are It attached. It your response must be sent at the earliest possible
direction along the corridor. One general purp Del Mar Heights Road to State Route 78. The improvements and auxiliary lanes where need (DARs) to allow transit vehicles and carpoole! This is to inform you that the California Depar Federal Highway Administration will be the lesimpact report/statement (EIR/EIS) for the proj as a responsible agency is requested in the power will be to the project of the project	pose lane in each direction may also be added from e project would also include interchange ded and approximately five direct access ramps as a transition point into the designated HOV lanes. Intermet of Transportation in cooperation with the ad agency and will prepare an environmental ject described within this notice. Your participation preparation and review of this document. Is to the scope and content of the environmental statutory responsibilities in connection with the use the EIR prepared by our agency when clons for the project. Imap, and the potential environmental effects are It attached. It your response must be sent at the earliest possible
direction along the corridor. One general purp Del Mar Heights Road to State Route 78. The improvements and auxiliary lanes where need (DARs) to allow transit vehicles and carpooler. This is to inform you that the California Depar Federal Highway Administration will be the lesimpact report/statement (EIR/EIS) for the projas a responsible agency is requested in the power of the project of the p	pose lane in each direction may also be added from e project would also include interchange ded and approximately five direct access ramps as a transition point into the designated HOV lanes. The additional properties of transportation in cooperation with the additional agency and will prepare an environmental ject described within this notice. Your participation preparation and review of this document. It is to the scope and content of the environmental statutory responsibilities in connection with the use the EIR prepared by our agency when closs for the project. It is a prepared by our agency when closs for the project. It is a prepared by our agency when closs for the project. It is a prepared by our agency when closs for the project. It is a prepared by our agency when close for the project. It is a prepared by our agency when close for the project. It is a prepared by our agency when close for the project. It is a prepared by our agency when close the project. It is a prepared by our agency when close the project. It is a prepared by our agency when close the project. It is a prepared by our agency when close the project. It is a prepared by our agency when close the project. It is a prepared by our agency when close the project. It is a prepared by our agency when close the project is a prepared by our agency when close the project. It is a prepared by our agency when close the prepared by our agency when close the project is a prepared by our agency when close the project is a prepared by our agency when close the project is a prepared by our agency when close the project is a prepared by our agency when close the project is a prepared by our agency when close the project is a prepared by our agency when close the project is a prepared by our agency when close the project is a prepared by our agency when close the project is a prepared by our agency when close the project is a prepared by our agency when close the project is a prepared by our agency when close the project is a prepared by

Figure 5-1.2b: Notice of Preparation to San Diego County Clerk



U.S. Department of Homeland Security
United States
Coast Guard

Commander Eleventh District U.S. Coast Guard Island, Bldg 50-2 Alameda, CA 94501-5100 Staff Symbol: (dpw) Phone: (510) 437-3514 Fax: (510) 437-5836

16590

Los Penasquitos Lagoon/River San Dieguito Lagoon San Elijo Lagoon Batiquitos Lagoon Agua Hedionda Lagoon Buena Vista Lagoon San Luis Rey River Carmel Valley Creek Loma Alta Creek

December 13, 2012

California Dept. of Transportation Attn: Ms. Shay Lynn M. Harrison 4050 Taylor Street, M. S. 242 San Diego, CA 92100

Dear Ms. Harrison:

As discussed with Ms. Sandra Lavender at Caltrans, we have completed our review of information provided concerning the ongoing Interstate 5 North Coast Corridor Project in San Diego County, California.

The I-5 bridge crossings on the following waterways are located on reaches of the waterways that are considered navigable. However, the waterways are not navigated by anything larger than small motorboats and the waterways meet the criteria for Advance Approval of bridges pursuant to Title 33, Code of Federal Regulations, Part 115.70.

- a. San Diego River.
- b. Los Penasquitos Lagoon and River.
- c. San Dieguito Lagoon.
- d. San Elijo Lagoon.
- e. Batiquitos Lagoon.
- f. Agua Hedionda Lagoon.

The General Bridge Act of 1946 requires the approval of the location and plans of bridges prior to the start of construction (33 U.S.C. 525). The Commandant has given advance approval to the location and plans of bridges to be constructed across reaches of waterways considered navigable, but not actually navigated by other than logs, log rafts, rowboats, canoes and small motorboats. In such cases, the clearances provided for high water stages will be considered adequate to meet the reasonable needs of navigation (33 C.F.R. 115.70).

No individual Coast Guard bridge permit will be required for this part of the project (COMDTINST M16590.5C). This does not relieve the applicant from complying with all applicable federal, state and local laws, and associated permit requirements.

Figure 5-3.1: U.S. Coast Guard Letter Regarding Bridges



16590 December 13, 2012

If the character of navigation changes, such that one of the waterways no longer meets advance approval criteria, the Coast Guard will promptly withdraw the advance approval designation for the waterway, and notify all interested parties.

A photograph and as-built drawings (8½x11-inch) of the bridges are required upon completion of the project. The drawings should indicate the elevation of the lowest hittable part of the bridges above mean high water, or mean sea level, over the channel.

Our review and determination remains valid for a period of two years from the date of this letter and becomes null and void if the project has not begun within that time frame.

Please notify our office upon beginning and completing the bridge-related, over-water portions of the project, with 30 days advance notice, so we may provide Notice to Mariners.

The I-5 bridge crossings of the following waterways are located on reaches of the waterways considered to be non-navigable. Under the provisions of the Coast Guard Authorization Act of 1982, the Coast Guard has determined that these projects do not require Coast Guard involvement for bridge permit purposes:

- a. Buena Vista Lagoon
- b. San Luis Rey River
- c. Carmel Valley Creek
- d. Loma Alta Creek

You may contact Mr. Chris Cerles, Project Manager, by telephone at (510) 437-3461, to discuss this project.

Sincerely,

Chief, Bridge Section
Eleventh Coast Guard District

By direction of the District Commander

Copy: U. S. Army Corps of Engineers, Los Angeles District Coast Guard Sector San Diego

2

Figure 5-3.1 (cont.): U.S. Coast Guard Letter Regarding Bridges





United States Department of the Interior



FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, California 92009

In Reply Refer To: FWS-SDG-3819.4

JAN 3 2005

Mr. Cesar E. Perez
Team Leader – South Region
U.S. Department of Transportation
Federal Highway Administration
650 Capitol Mall, Suite 4-100
Sacramento, California 95814

Re: North Coast Interstate 5 Corridor Project – Request for Concurrence on Purpose and Need

Dear Mr. Perez:

We are responding to your December 10, 2004, letter, received on December 14, 2004, requesting U.S. Fish and Wildlife Service (Service) concurrence through the National Environmental Policy Act and Clean Water Act Section 404 Integration Process (NEPA/404 Integration Process) for Surface Transportation Projects in Arizona, California, and Nevada (1993) on the final version of the Purpose and Need for the North Coast Interstate 5 Corridor Project.

The Service has been extensively involved in the pre-scoping process and development of the Purpose and Need for the North Coast Interstate 5 Corridor Project. The Service concurs with the December 10, 2004, version of the Purpose and Need for the North Coast Interstate 5 Corridor Project.



Figure 5-4.1: USFWS Concurrence with Purpose and Need



Mr. Cesar E Perez (FWS-SDG-3819.4)

If you have any questions or concerns about this letter, please contact John DiGregoria of my staff at (760) 431-9440.

Sincerely,

Assistant Field Supervisor

Charles "Muggs" Stoll, Deputy District Director Environmental Division, Caltrans cc: District 11 Office

Figure 5-4.1 (cont.): USFWS Concurrence with Purpose and Need





UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802- 4213

DEC 17 2004

F/SWR4:WBC

Mr. Charles Stoll
Deputy Director Environmental Division, District 11
California Department of Transportation
P.O. Box 85406
San Diego, California 92186-5406

Dear Mr Stoll:

This letter is in response to your request seeking concurrence with the purpose and need for the North Coast Interstate 5 Corridor Project. The National Marine Fisheries Service (NOAA Fisheries) has been extensively involved with the development of the purpose and need statement relative to this project. As a consequence, we concur with the version that accompanied your letter of December 10, 2004.

Should you have any questions regarding the position of our agency on this issue, please contact Mr. Robert Hoffman of my staff at 562-980-4043 or via email at: bob.hoffman@noaa.gov.

Sincerely,

Valerie L. Chambers

Assistant Regional Administrator for Habitat Conservation

cc:

USFWS - Carlsbad (John DiGregoria)

EPA - San Francisco (Connell Dunning)

EPA - San Francisco (Elizabeth Goldmann)

COE - Los Angeles (Stephanie Hall)



Figure 5-4.2: NOAA/NMFS Concurrence with Purpose and Need





DEPARTMENT OF THE ARMY

LOS ANGELES DISTRICT, CORPS OF ENGINEERS P.O. BOX 532711 LOS ANGELES, CALIFORNIA 90963-2325

January 19, 2005

Office of the Chief Regulatory Branch

Charles Stoll
Deputy Director, Environmental Division
California Department of Transportation, District 11
P.O. Box 85406
San Diego, California 92186-5406

Dear Mr. Stoll:

This letter is in response to your request of December 10, 2004, for concurrence on the Purpose and Need statement for the North Coast Interstate 5 (I-5) Corridor Project. This request is pursuant to Appendix A of the National Environmental Policy Act/Clean Water Act, Section 404 Integration Process Memorandum of Understanding (NEPA/404MOU).

The Corps has participated with the California Department of Transportation (Caltrans), the Federal Highway Administration (FHWA), and other regulatory agencies in the development of a supportable purpose and need statement. The Corps concurs with the project Purpose and Need as presented in the document entitled "North Coast Interstate 5 Corridor Project," dated December 10, 2004. We support the overall project purpose statement presented below, which will be used to help develop and screen the alternatives that will be evaluated in an environmental impact statement.

To maintain or improve the existing and future traffic operations in the I-5 north coastal corridor in order to improve the safe and efficient regional movement or people and goods for the planning design year of 2030.

More specifically, the project objectives are to:

- Maintain or improve future traffic levels of service in 2030 over the existing levels of service,
- Maintain or improve travel times within the corridor,
- Provide a facility that is compatible with future bus rapid transit and other modal options,
- Provide consistency with the regional transportation plan, Mobility 2030 The Transportation Plan for the San Diego Region, SANDAG, April 2003 (SANDAG 2030 RTP) where feasible and in compliance with federal and state regulations,
- · Maintain the facility as an effective link in the national Strategic Highway Network, and
- Protect and/or enhance the human and natural environment along the I-5 corridor.

The next step in the NEPA/404 Integration Process is to identify a set of screening criteria that will facilitate the selection of alternatives for evaluation pursuant to both NEPA and

Figure 5-4.3: USACE Concurrence with Purpose and Need



-2-

Section 404. Under Appendix A of the NEPA/404 MOU, we will be asked to concur on both the screening criteria and the range of alternatives.

We appreciate the opportunity to participate in the NEPA/404 MOU process and appreciate your efforts to seek our early participation in this process. We look forward to our continued involvement with the North Coast Interstate 5 Corridor project. Should you have any questions, please contact Ms. Stephanie J. Hall of my staff at (213) 452-3410. Please refer to this letter and 200401089-SJH in your reply.

Sincerely,

David J. Castanon

Acting Chief, Regulatory Branch

CC:

USFWS - Carlsbad (John DiGregoria)

EPA - San Francisco (Connell Dunning

EPA - San Francisco (Elizabeth Goldmann)

NOAA - Long Beach (Bob Hoffman)

Figure 5-4.3 (cont.): USACE Concurrence with Purpose and Need





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX 75 Hawthorne Street

San Francisco, CA 94105-3901

January 10, 2004

Charles Stoll
Deputy Director Environmental Division
California Department of Transportation
P.O. Box 85406
San Diego, CA 92186-5406

Cesar Perez Team Leader - South Region Federal Highway Administration 650 Capitol Mall, Suite 4-100 Sacramento, CA 95814

Dear Mr. Stoll and Mr. Perez:

The U.S. Environmental Protection Agency (EPA) is writing in response to your request of December 10, 2004 for concurrence on the Purpose and Need statement for the proposed North Coast Interstate 5 (I-5) Corridor Project. The purpose of this letter is to express EPA's concurrence with the Purpose and Need statement. Your request is in accordance with the National Environmental Policy Act/Clean Water Act Section 404 Integration Process for Surface Transportation Projects in California, Arizona, and Nevada Memorandum of Understanding (NEPA/404 MOU).

Concurrence on Purpose and Need

California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) propose improvements along the I-5 Corridor from Miramar Road north to Vandergriff Boulevard. Widening of the highway in the project area will affect an estimated 25 acres of wetlands and has the potential to affect wildlife and sensitive habitats associated with six lagoons: San Dieguito, San Elijo, Bataquitos, Agua Hedionda, Buena Vista, and Los Pensaquitos. EPA has been involved with the development of the Purpose and Need statement through multiple interagency meetings. We are pleased with the incorporation of our comments and recognize the efforts of Caltrans and FHWA in finalizing a Purpose and Need statement that addresses the concerns of the federal regulatory agencies.

EPA concurs with the following Purpose and Need statement:

OVERALL PURPOSE STATEMENT

To maintain or improve the existing and future traffic operations in the I-5 north coastal corridor in order to improve the safe and efficient regional movement of people and goods for the planning design year 2030.

Printed on Recycled Paper

Figure 5-4.4: USEPA Concurrence with Purpose and Need



PROJECT OBJECTIVES

The objectives of this project are to:

- Maintain or improve future traffic levels of service in 2030 over the existing levels of service,
- Maintain or improve travel times within the corridor,
- Provide a facility that is compatible with future bus rapid transit and other modal options,
- Provide consistency with the regional transportation plan, Mobility 2030 The Transportation Plan for the San Diego Region, SANDAG, April 2003
 (SANDAG 2030 RTP) where feasible and in compliance with federal and state regulations,
- Maintain the facility as an effective link in the national Strategic Highway Network, and
- Protect and/or enhance the human and natural environment along the I-5 corridor.

Status of Other Transportation Projects along the I-5 Corridor

On September 9, 2004 a manager-level meeting was convened to discuss the Purpose and Need statement as well as the status of multiple projects along the I-5 Corridor that are in various stages of planning and construction. At that time, and in previous interagency meetings, EPA as well as Army Corps of Engineers, Fish and Wildlife Service, and National Marine Fisheries Service, expressed concerns regarding the potential for decisions resulting from other projects along the corridor to preclude the analysis of a range of reasonable alternatives to be studied through the North Coast I-5 Corridor Project. Caltrans and FHWA committed to discuss this matter internally and to provide a response to the regulatory agencies regarding this issue. As of this date, EPA has received no formal response regarding our concerns. While it does not affect our concurrence on the Purpose and Need statement, resolution on this matter is integral to an understanding of the scope of the North Coast I-5 Corridor Project as the NEPA/404 integration process continues.

Other Federal Mitigation Efforts

Several mitigation projects that were established as permitting requirements for other federal projects occur within the footprint of the proposed project, including the Bataquitos Lagoon Enhancement Project and the San Onofre Nuclear Generating Station (SONGS) Marine Mitigation Program. The Bataquitos Lagoon Enhancement Project is one of the largest wetland restoration projects undertaken as mitigation for a port project in the United States and was developed as a requirement to mitigate resources lost in the Outer Los Angeles Harbor due to dredging and construction. The SONGS Marine Mitigation Program is an environmental enhancement program developed to mitigate unavoidable impacts to the marine environment resulting from operation of the SONGS Units 2&3 cooling water systems. The program includes restoring degraded wetlands at San Dieguito Lagoon, improving the in-plant fish protection systems, and funding for Coastal Commission staff oversight and monitoring of these mitigation projects. Because these mitigation efforts are required as a result of federal permitting actions, it will be important for Caltrans and FHWA to develop alternatives that are designed to allow for

2



the continued implementation of these mitigation commitments.

We are pleased that the Purpose and Need statement indicates that Caltrans and FHWA "will seek to not impede these efforts and will identify opportunities to offset potential project impacts to the maximum extent practicable" and that "enhancements to the conditions of sensitive environmental habitat will be incorporated, where feasible and practicable when considering cost, logistics, and technology." This supports the objective of "protecting and/or enhancing the natural environment" and conveys the transportation agencies' intentions to protect the coastal lagoon ecosystem during project development.

Thank you for this opportunity to participate in the development of the North Coast I-5 Corridor Study Purpose and Need statement. We look forward to continued participation in this project through the NEPA/404 MOU. If you have any questions or comments, please feel free to contact me at 415-972-3854. You can also contact Connell Dunning at 415-947-4161 (dunning.connell@epa.gov) or Elizabeth Goldmann at 415-972-3398 (goldmann.elizabeth@epa.gov).

Sincerely.

Lisa B. Hanf, Manager

Federal Activities Office

cc: John DiGregoria, Fish and Wildlife Service Stephanie Hall, Army Corps of Engineers Bob Hoffman, National Marine Fisheries Service

3

Figure 5-4.4 (cont.): USEPA Concurrence with Purpose and Need



08/24/2006 09:38 FAX 7604315902

US FISH AND WILDLIFE

Ø 002



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services Carlsbad Fish and Wildlife Office 6010 Hidden Valley Road Carlsbad, California 92011

In Reply Refer To: FWS-SDG-3819.9

AUG 2 4 2006

Ms. Susanne Glasgow Deputy District Director **Environmental Division** Department of Transportation 2829 Juan Street P.O. Box 85406, M.S. 46 San Diego, California 92110

Subject:

Concurrence on Range of Alternatives for North Coast Interstate 5 Corridor

Project

Dear Ms. Glasgow:

The U.S. Fish and Wildlife Service (Service) has received your letter dated August 1, 2006, requesting our concurrence on the range of alternatives for the North Coast Interstate 5 Corridor Project to be considered in the draft Environmental Impact Statement. Those alternatives include the 10+4 with Buffer, 10+4 with Barrier, 8+4 with Buffer, 8+4 with Barrier, and the No Build Alternative. You have also requested our concurrence on the removal of the 8+2HOV alternative from further review.

Information provided during previous meetings has given details on the reason for dropping the 8+2HOV alternative. The Service concurs with removing the 8+2HOV alternative from further consideration due to the projects futility in meeting future traffic needs. Also, the Service concurs on the list of alternatives for further consideration and acknowledges that a number of projects would continue to go forth in the No Build Alternative scenario.

If you have any questions with regards to this letter please contact Kurt Roblek of my staff (760-431-9440, ext. 308).

Assistant Field Supervisor

Robert Hoffman, NOAA Cc: Connell Dunning, EPA Elizabeth Goldman, EPA Stephanie Hall, Corps

Figure 5-4.5: USFWS Concurrence with Range of Alternatives





UNITED STATES DEPARTMENT OF COMMERCE National Opernic and Atmospheric Administration National, Making Persons service

Southwest Region 901 West Ocean Boulevard, Suite 4200 Long Beach, California 90802- 4213

F/SWR4:RSH

AUS 7 2006

Ms. Susanne Glasgow Deputy District Director Environmental Division Department of Transportation 2829 Juan Street P.O. Box 85406, M.S. 46 San Diego, California 92110

Dear Ms. Glasgow: .

NOAA's National Marine Fisheries Service (NMFS) has reviewed your letter of August 1, 2006, which seeks our concurrence on a range of project alternatives to be considered in the deaft Environmental Impact Statement/Report (DEIS/R) for the North Coast Interstate 5 (I-5) Corridor Project. Those alternatives include the 10+4 with Buffer, 10+4 with Barrier, 8+4 with Buffer, 8+4 with Barrier, and the No Build alternative. Furthermore, you have requested our concurrence with the removal of the 8+2HOV alternative from further consideration.

As a consequence of a series of meetings where additional information was provided to justify those alternatives selected to be carried forward during the development of the DEIS/R, NMFS concurs with your proposed range of alternatives. In addition, we concur with your decision to remove the 8+2HOV from further consideration.

Should you have any questions regarding our comments, please contact me at 562-980-4043 or via email at: bob.haffman@nosa.gov.

Sincerely.

Robert S. Hoffman

Assistant Regional Administrator for Habitat Conservation.

CC.

EPA - Connel Dunning EPA - Elizabeth Goldmann COE - Stephanie J. Hall USFWS - Kurt Roblek



Figure 5-4.6: NOAA/NMFS Concurrence with Range of Alternatives





DEPARTMENT OF THE ARMY

LOS ANGELES DISTRICT, CORPS OF ENGINEERS P.O. BOX 532711 LOS ANGELES, CALIFORNIA 90053-2325

ATTENTION OF:

August 21, 2006

Office of the Chief Regulatory Branch

California Department of Transportation, District 11 Attention: Susanne Glasgow, Deputy District Director Environmental Division, MS-242 4050 Taylor Street San Diego, CA 92110

Dear Ms. Glasgow:

At the request of the California Department of Transportation (Caltrans), the U.S. Army Corps of Engineers (USACE) has been asked to provide concurrence on a "Range of Project Alternatives" for the North Coast I-5 Corridor Project, located in northern coastal San Diego County, California. This request letter and supplemental information package was initially submitted and dated July 5, 2006 and subsequently revised and resubmitted on August 1, 2006.

We appreciate the opportunity for continued involvement on this project, and pursuant to the National Environmental Policy Act, Clean Water Act Section 404 Integration Process Memorandum of Understanding (NEPA/404 MOU), we are providing concurrence on the "Range of Alternatives" per your revised August 1, 2006 request. Your submittal provides the range of alternatives to be carried forward for detailed analysis in the Draft Environmental Impact Statement/Report (EIS/EIR). Your submittal also provides clarification of the "No Build Alternative", as well as projects that would be independent from the I-5 Corridor Project.

The "Range of Alternatives" to be carried forward in the Draft EIS/EIR includes the following: the 10+4 with Buffer Alternative, the 10+4 with Barrier Alternative, the 8+4 with Buffer Alternative, and the 8+4 with Barrier Alternative. The "No Build Alternatives" include the I-5/I-805 Widening, I-5/Genesee Avenue Interchange, I-5 Mid-Coast Free Improvements, I-805 North Improvements, SR-56 Improvements, SR-78 Improvements and the LOSSAN Rail Improvements. Projects that would be incorporated into the analysis of the I-5 Corridor Project or be separate projects to be initiated after a decision is rendered on the I-5 Corridor Project include the Sorrento Valley Road/Roselle Street, Manchester Interchange, Birmingham to Leucadia auxiliary lane, Encinitas Boulevard, and I-5/SR-78 Connector projects. The I-5/SR-56 Freeway Connectors, the Lomas Santa Fe Interchange, and the HOV Extension between San Dieguito River and San Elijo Lagoon Bridge are considered separate projects and would proceed independently.

Figure 5-4.7: USACE Concurrence with Range of Alternatives

-2-

The next step in the NEPA/404 Integration Process is the preparation of the project Draft EIS/EIR. The Corps values our role as a Cooperating Agency for the proposed project and the opportunity to provide meaningful input and continued regulatory guidance with regard to on-going project efforts. If you have any questions, please contact Stephanie J. Hall of my staff at (213) 452-3410. Please refer to this letter and 200401089-SJH in your reply.

Sincerely,

David J. Castanon Chief, Regulatory Branch

cc: EPA-San Francisco (Connell Dunning) EPA-San Francisco (Elizabeth Goldmann) USFWS-Carlsbad (Kurt Roblek) NOAA-Long Beach (Bob Hoffman)

Figure 5-4.7 (cont.): USACE Concurrence with Range of Alternatives





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX 75 Hawthorne Street San Francisco, CA 94105-3901

Lisa Cathcart-Randall Team Leader - South Region Federal Highway Administration 650 Capitol Mall, Suite 4-100 Sacramento, CA 95814 Suzanne Glasgow California Department of Transportation District 11, MS-242 4050 Taylor Street San Diego, CA 92110

Subject: Concurrence on Range of Alternatives for North Coast I-5 Corridor Project

Dear Ms. Cathcart-Randall and Ms. Glasgow:

This letter responds to your dated August 1, 2006 letter requesting concurrence on Range of Alternative to be analyzed in the Draft Environmental Impact Statement (EIS) for the North Coast I-5 Corridor Project in San Diego, CA (enclosed). The request is pursuant to the National Environmental Policy Act/Clean Water Act Section 404 Integration Process Memorandum of Understanding, 2006 (NEPA/404 MOU).

The U.S. Environmental Protection Agency (EPA) offers its concurrence on the Range of Alternatives listed below and further described in the enclosed August 1, 2006 letter. As discussed in the I-5 Corridor Project Interagency meetings, these alternatives will be analyzed in the Draft EIS to be completed for this project:

- 10+4 with Buffer Alternative
- 10+4 with Barrier Alternative
- 8+4 with Buffer Alternative
- 8+4 with Barrier Alternative

We commend the California Department of Transportation (Caltrans) and Federal Highway Administration (FHWA) for responding to our concerns regarding other projects within the I-5 Corridor (see enclosed table, *Proposed Projects Along North Coast Interstate 5 Corridor*). As noted in previous interagency meetings, EPA, as well as U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and National Marine Fisheries Service, have expressed concerns that decisions resulting from other projects within the study area along I-5 may preclude the consideration of a range of reasonable alternatives for the North Coast I-5 Corridor Project. Caltrans and FHWA have provided additional information on the independent utility and logical termini for those projects, including information on whether they would preclude evaluation of alternatives for I-5. We have agreed with the independent utility of the 5/56 Freeway Connectors, the Lomas Santa Fe Interchange, and the HOV Extension between San Dieguito River and San Elijo Lagoon Bridge. We agree with the decision to either incorporate the an alysis of the Sorrento Valley Road/Roselle Street, Manchester Interchange, Birmingham to Leucadia auxiliary lane, Encinitas Boulevard, and 5/78 Connectors into the

Printed on Recycled Paper

Figure 5-4.8: USEPA Concurrence with Range of Alternatives



analysis of the North Coast project, or to analyze the projects separately after a decision is rendered on the North Coast project.

We note that during Interagency meetings, the California Countal Commission has continued to raise concerns related to the potential impacts to countal resources from the proposed project alternatives. We encourage Caltrans and FHWA to continue coordinating with the California Coastal Commission regarding its concerns, and support inclusion of any additional design modifications to further avoid and minimize coastal impacts. We also support additional alternatives be analyzed in the Deaft EIS should a broader range of alternatives be needed to satisfy state requirements.

As a next step, and as described in the NEPA/404 MOU, EPA will review the Draft EIS. We are available to continue working with the Interagency Group to further refine the design of project alternatives to increase measures to avoid and minimize impacts to resources. In addition, we would like to continue being involved in conceptual mitigation discussions.

Thank you for requesting our concurrence on the range of alternatives to be analyzed in the Draft EIS. If you have any questions or comments, please contact me at (415) 972-3988 or Connell Dunning of my staff at (415) 947-4161 or at Dunning.Connell@epa.gov.

Sincerely,

Sor

Duane James, Manager Environmental Review Office

Enclosure: Caltrans Request for Concurrence

Ce: Surame Glasgow, California Department of Transportation
Tami Grove, California Coastal Commission.
Pam Beare, California Department of Fish and Game
Stephanie Hall, U.S. Army Corps of Engineers
Kurt Roblek, U.S. Fish and Wildlife Service
Bob Hoffman, National Oceanic and Atmospheric Administration
Richard Chavez, SANDAG

ě

Figure 5-4.8 (cont.): USEPA Concurrence with Range of Alternatives





United States Department of the Interior

FISRA WILLIAMS

FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, California 92009

In Reply Refer To: FWS-SDG-3819.7

Mr. Gene K. Fong
Division Administrator
U.S. Department of Transportation
Federal Highway Administration
650 Capitol Mall, Suite 4-100
Sacramento, California 95814

MAY 2 5 2005

Re:

North Coast Interstate 5 Corridor Project – Request for Concurrence on Screening

Criteria

Dear Mr. Fong:

We are responding to your April 28, 2005, electronic mail message received on April 28, 2005, requesting U.S. Fish and Wildlife Service (Service) concurrence through the Nation Environmental Policy Act and Clean Water Act Section 404 Integration Process (NEPA/404 Integration Process) for Surface Transportation Projects in Arizona, California, and Nevada (1993) on the Screening Criteria for the North Coast Interstate 5 Corridor Project.

The Service has been extensively involved in the NEPA/404 Integration Process for the North Coast Interstate 5 Corridor Project. The Service concurs with the April 28, 2005, version of the Screening Criteria for the North Coast Interstate 5 Corridor Project.



Figure 5-4.9: USFWS Concurrence with Criteria Matrix



Mr. Gene K. Fong (FWS-SDG-3819.7)

2

If you have any questions or concerns about this correspondence, please contact John DiGregoria of my staff at (760) 431-9440, extension 203.

Sincerely,

Therese O'Rourke Assistant Field Supervisor

cc: Charles "Muggs" Stoll, Deputy District Director Environmental Division, Caltrans District 11 Office

Figure 5-4.9 (cont.): USFWS Concurrence with Criteria Matrix





UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802-4213

MAY 19 2005

F/SWR4:RSH

Mr. Charles Stoll
Deputy Director Environmental Division, District 11
California Department of Transportation
P.O. Box 85406
San Diego, California 92186-5406

Dear Mr Stoll:

This letter is in response to your request seeking concurrence with the April 27, 2005, version of the screening criteria for the North Coast Interstate 5 Corridor Project. NOAA's National Marine Fisheries Service concurs with those criteria.

Should you have any questions regarding the position of our agency on this issue, please contact Mr. Robert Hoffman of my staff at 562-980-4043 or via email at: bob.hoffman@nosa.gov.

Sincerely.

Valerie L. Chambers

Assistant Regional Administrator for Habitat Conservation

cc

USFWS - Carlsbad (John DiGregoria) EPA - San Francisco (Connell Dunning) EPA - San Francisco (Elizabeth Goldmann) COE - Los Angeles (Stephanie Hall)

FHWA - Sacramento (Cesar Perez)



Figure 5-4.10: NOAA/NMFS Concurrence with Criteria Matrix





DEPARTMENT OF THE ARMY

LOS ANGELES DISTRICT, CORPS OF ENGINEERS P.O. BOX 532711 LOS ANGELES, CALIFORNIA 90053-2325

June 29, 2005

REPLY TO ATTENTION OF:

Office of the Chief Regulatory Branch

Cesar E. Perez Team Leader-South Region Federal Highway Administration, California Division 650 Capitol Mall, Suite 4-100 Sacramento, California 95814

Subject: Concurrence on Screening Criteria for North Coast I-5 Corridor Project

Dear Mr. Perez:

At the request of the Federal Highways Administration (FHWA) and the California Department of Transportation (Caltrans), the U.S. Army Corps of Enginers (USACE) has been asked to provide concurrence on Screening Criteria for the North Coast I-5 Corridor Project, San Diego, California.

We appreciated the opportunity for continued involvement on this project, and pursuant to the National Environmental Policy Act Clean Water Act section 404 Integration Process Memorandum of Understanding (NEPA/404 MOU), we are providing concurrence on the Screening Criteria for the North Coast I-5 Corridor Project as revised and submitted on April 28, 2005. The document provides evaluation criteria and measured parameters to be used in the identification of alternatives best suited to be carried forward for detailed analysis in the Draft Environmental Impact Statement/Report (EIS/EIR).

The next step in the NEPA/404 Integration Process is to identify a range of alternatives to be included in the Draft EIS/EIR. We anticipate the opportunity to incorporate the concerns of this agency in specific regard to the issue of independent utility related to several projects planned along the I-5 Corridor. The Corps, as well as other Ferderal and State resource agencies, has expressed concern that decisions resulting from these projects may preclude the consideration of a range of reasonable alternatives for the North Coast I-5 Corridor Project. Although supplemental information has been provided addressing this issue, the decision of whether to incorporate some, all, or none of these projects into the larger I-5 project is on-going.

Figure 5-4.11: USACE Concurrence with Criteria Matrix

-2-

Once again, we appreciate this opportunity for continued involvement in the development of this project. If you have any questions, please contact Stephanie J. Hall of my staff at (213) 452-3410. Please refer to this letter and 200401089-SJH in your reply.

Sincerely,

David J. Castanon Chief, Regulatory Branch

cc:

EPA (Connell Dunning)
EPA (Elizabeth Goldmann)
USFWS (John DiGregoria)
NOAA (Robert Hoffman)
Caltrans (Gladys Baird)

Figure 5-4.11 (cont.): USACE Concurrence with Criteria Matrix



05/24/05 08:28

2415 744 1598

U.S.EPA/OFA

20001



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX 75 Hawthorne Street

San Francisco, CA 94105-3901

May 23, 2005

Cesar E. Perez Team Leader - South Region Federal Highway Administration 650 Capitol Mall, Suite 4-100 Sacramento, CA 95814

Subject:

Concurrence on Screening Criteria for North Coast I-5 Corridor Project

Dear Mr. Perez:

This responds to your letter, dated April 20, 2005, requesting concurrence on Screening Criteria for the North Coast I-5 Corridor Project in San Diego, CA. The request is pursuant to Appendix A of the National Environmental Policy Act/Clean Water Act Section 404 Integration Process Memorandum of Understanding (NEPA/404 MOU).

EPA offers our concurrence on the Screening Criteria as they are presented in the enclosed document entitled, "Screening Criteria Table - North Coast Interstate 5 Corridor Project," as revised and sent on April 28, 2005. As discussed in the I-5 Corridor Project Agency Meetings, these screening criteria will be used to narrow the broad set of initial alternatives to a final set of alternatives for detailed assessment in the Draft Environmental Impact Statement (EIS). We commend Federal Highway Administration and the other project sponsors for your diligent work in compiling this comprehensive list of criteria and your willingness to incorporate resource agency suggestions to minimize environmental impacts through this process.

The screening criteria, as defined here, should form the basis for a revised set of criteria, which will be used to evaluate alternatives in the Draft and Final EIS. This evaluation will ultimately lead to selection of a preferred alternative. We expect that this latter set of criteria will rely on more detailed information for environmental impacts, generally not available at this early stage. Your excellent work on these screening criteria forms a solid basis for the final criteria to be included in the Draft EIS.

As a next step, and as described in the NEPA/404 MOU, we will work with FHWA and the other project sponsors to identifying a range of alternatives to be included in the Draft EIS. We also look forward to coordination on EPA's concerns regarding the independent utility of multiple projects planned along the I-5 Corridor. As noted in previous interagency meetings, EPA as well as Army Corps of Engineers, Fish and Wildlife Service, and National Marine Fisheries Service, have expressed concerns that decisions resulting from these projects may preclude the consideration of a range of reasonable alternatives for the North Coast I-5 Corridor

Printed on Recycled Paper

Figure 5-4.12: USEPA Concurrence with Criteria Matrix



05/24/05

08:28

2415 744 1598

U.S.EPA/OFA

@1002

Project (I-5). Caltrans and FHWA have provided additional information on the independent utility and logical termini for those projects, including information on whether they would preclude evaluation of alternatives for I-5. We have agreed with the independent utility of the State Route 56 Improvement Project in the City of San Diego but have remaining concerns with several interchange projects along the corridor, especially at Manchester. EPA is meeting with FHWA and Caltrans to discuss whether these other projects should be incorporated into, or separated from, the I-5 project. We appreciate the efforts by Caltrans and FHWA on this matter.

Thank you for requesting our agreement on Screening Criteria to identify alternatives that will be analyzed in the Draft EIS. If you have any questions or comments, please contact me or Connell Dunning of my staff at (415) 947-4161 or at Dunning.Connell@epa.gov.

Sincerely,

Nova Blazej, Acting Manager Environmental Review Office

Enclosure:

Screening Criteria Table

Ce:

Charles "Muggs" Stoll, California Department of Transportation John DiGregoria, Fish and Wildlife Service Stephanie Hall, Army Corps of Engineer's Bob Hoffman, National Marine Fisheries Service Tami Grove, California Coastal Commission Pam Beare, California Department of Fish and Game

2

Figure 5-4.12 (cont.): USEPA Concurrence with Criteria Matrix



05/24/05 08:29 12415 744 1598	U.S.EPA/OFA 2003				
	North Coast Interstate 5 Corridor Project				
Evaluation Criteria	Measured Parameter				
Traffic Flow and Congestion Relief	Total hours of vehicle travel; daily vehicle hours of delay compared to No Build; LOS (A, B, C); Peak Period Miles of LOS F; Origin-Destination Travel Times along I-Scorridor				
Compatible with future bus rapid transit and other modal options	Accommodate mass transit included in 2030 RTP				
3. Impacts to FEMA 100-year floodplains	Acres				
Impacts to Waters of the U.S. including wetlands and coastal lagoons	Acres directly and indirectly affected				
5. Impacts to Waters of the State including wetlands	Acres directly and indirectly affected				
6. Impacts to Coastal Commission wetlands	Acres directly and indirectly affected Effects on hydrology (sedimentation) and tidal circulation				
 Impacts to transitional/upland habitats associated with wetlands and shading of wetlands 	Acres permanently and temporarily affected				
Impacts to Federal and State T and E plant species	Species directly and indirectly affected				
 Impacts to Federal and State T and E animals species 	Species directly and indirectly affected				
 Impacts to Federal and State listed T and E habitat 	Acres of habitat directly and indirectly affected				
11. Impacts to existing permitted restoration efforts	Acres of existing restoration efforts directly and indirectly affecte				
 Impacts to biological core areas and linkages including those in NCCP areas 	Yes/No				
13. Economic impacts to the region	Hours of delay times average cost per hour of delay				
14. Impacts to Environmental Justice communities					
15. Residential units displaced	Number of residential units				
16. Community Connectivity	Number and type of facility that can restore connectivity				
17. Businesses displaced	Number of businesses				
18. New Right of Way	Acres acquired				
19. Project Cost-including Right of Way acquisition and construction	Total Cost (in millions)				
20. Estimated biological mitigation costs	Total Cost/Acre				
21. Number of 4(f) resources affected	Name/type of resource/acres affected				
 Eligible and listed cultural resource sites affected 	Number of eligible and number of listed sites				
23. Noise Impacts	Number of receptor sites that exceed Noise Abatement Criteria				
24. Visual Impacts	Square footage of walls Effects on public views of ocean/scenic resource areas				
25. Median planting remain	Yes/No and type of planting				
26. Mature Tree Removal	Number and type of trees				
27. Maintainability of Facilty	High/Medium/Low				
28. Geometric Design Standards	Number of design exceptions/type .				
29. Consistency with local land use and circulation plans	Plans non-conforming				
30. Water Treatment	Water Quality Standards				
31. Hazardous Wastes	Number of known sites				
32. Air Quality	Number of residences and sensitive receptors within 100 meters of				
	the freeway and number of VMT				

Figure 5-4.12 (cont.): USEPA Concurrence with Criteria Matrix





United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services Carlsbad Fish and Wildlife Office 2177 Salk Avenue, Suite 250 Carlsbad, California 92008



In Reply Refer To: FWS-SDG-08B0100-13 CPA0203

JUN 1 8 2013

Ms. Kim Smith Chief, Environmental Stewardship Branch California Department of Transportation 4050 Taylor Street San Diego, California 92110

Request for Concurrence on the Least Environmentally Damaging Practicable

Alternative and Mitigation Plan for the I-5 North Coast Corridor Project, San Diego

County, California

Dear Ms. Smith:

We have reviewed your request dated April 29, 2013, for our concurrence on the Preliminary Least Environmentally Damaging Practicable Alternative (LEDPA) and Mitigation Plan (Resource Enhancement and Mitigation Program - REMP) for the 1-5 North Coast Corridor Project, pursuant to the National Environmental Policy Act/Clean Water Act Section 404 Integration Process for Federal Aid Surface Transportation Projects in California Memorandum of Understanding (NEPA/404 MOU). The California Department of Transportation (Caltrans) has assumed Federal Highway Administration's responsibilities with regard to environmental review, consultation, and NEPA compliance for this project in accordance with Section 6005 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) 2005, as described in the NEPA Delegation Pilot Program Memorandum of Understanding between FHWA and Caltrans (effective July 1, 2007), and codified in 23 U.S.C. 327(a)(2)(A).

We appreciate the coordination that has occurred on this project, including your consideration of the numerous concerns that the resource agencies have raised regarding the project and the associated mitigation measures. By transmittal of this letter, we provide our agreement that the 8 + 4 with Buffer Alternative, as described in your April 29, 2013, letter, is the Preliminary LEDPA for the I-5 North Coast Corridor Project. We also agree that the REMP meets your compensatory mitigation obligation for impacts to wetlands and uplands, although many of the details regarding the coastal lagoon restoration projects are un-resolved. We look forward to continuing to coordinate on the development and implementation of the restoration plans for the coastal wetlands.

For clarification purposes, our agreement should not be construed as support for all of the proposed community enhancement projects. We request that the resource agencies be given



Figure 5.4-13: USFWS Concurrence with LEDPA



Ms. Kim Smith (FWS-SDG-08B0100-13CPA0203)

2

further opportunity to review and comment on the location and extent of new trails and staging areas proposed within the lagoons, as well as design plans for the proposed wildlife connectivity features under the bridges.

We appreciate Caltrans commitment to continue to work closely with the resource agencies to further refine the design of the I-5 North Coast Corridor Project to avoid and minimize impacts to sensitive species and habitats. Thank you for the opportunity to participate in the transportation planning process; we look forward to our continued coordination in these matters. If you have any questions regarding this letter, please contact Susan Wynn of this office at 760-431-9440, extension 216.

Sincerely,

Karen A. Goebel

Assistant Field Supervisor

cc:

Stephanie Hall, Corps of Engineers, Los Angeles, CA Connell Dunning, Environmental Protection Agency, San Francisco, CA Elizabeth Goldmann, Environmental Protection Agency, San Francisco, CA

Figure 5.4-13 (cont.): USFWS Concurrence with LEDPA





UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802-4213

MAY 28 2013

In response, refer to: 2012/09268

Kim T. Smith, Chief Environmental Stewardship/Ecological Services Branch California Department of Transportation District 11 4050 Taylor Street, M.S. 242 San Diego, California 92110

NOAA's National Marine Fisheries Service (NMFS) has reviewed the Administrative Draft for the Final Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) for the Interstate 5 (I-5) North Coast Corridor Project, the draft response to our comments dated November 19, 2010, on the Draft EIR/EIS, and the Caltrans letter requesting agency concurrence on the preliminary Least Environmentally Damaging Practicable Alternative (LEDPA) and the Resource Enhancement and Mitigation Plan (REMP).

NMFS believes the draft response to our comments adequately addresses issues raised in our 2010 letter. NMFS has no additional, substantive comments to provide regarding the Final EIR/EIS, but is providing some clarifying comments regarding our interagency consultation process. On page 3.20-6, the Final EIR/EIS includes a paragraph discussing the essential fish habitat (EFH) consultation pursuant to the Magnuson-Stevens Fishery Conservation and Management Act and the consultation for endangered steelhead trout pursuant to Section 7 of the Endangered Species Act (ESA). NMFS would like to clarify that your EFH consultation requirement was satisfied by your January 3, 2013, response in which Caltrans adequately incorporated our EFH conservation recommendations. Assuming continued coordination on implementation of the REMP, NMFS has no additional comments to provide regarding EFH. As a matter of clarification, NMFS concluded Section 7 consultation in accordance with 50 CFR 402.13 (a) for the proposed project on May 16, 2013. NMFS recommends that the Final EIS/EIR reference the EFH and ESA consultations under separate headings given the different underlying issues and statutes.

NMFS appreciates the interagency coordination and Caltrans' approach to address adverse impacts associated with the proposed project. We concur that 8 + 4 with Buffer Alternative is the LEDPA and that the REMP provides the appropriate framework for meeting mitigation obligations for impacts to NMFS trust resources. We look forward to continued engagement on REMP implementation.

Thank you for consulting with NMFS. If you have any questions associated with our comments, please contact Bryant Chesney at (562) 980-4037 or Bryant.Chesney@noaa.gov.

Sincerely,

Acting Regional Administrator

NORA .

Figure 5.4-14: NOAA/NMFS Concurrence with LEDPA





DEPARTMENT OF THE ARMY

Los Angeles District, Corps of Engineers P.O. Box 532711 Los Angeles, California 90053-2325

July 15, 2013

ATTENTIONOR.

Office of the Chief
Regulatory Division

Kim T. Smith, Chief, Environmental Stewardship Branch California Department of Transportation, District 11 ATTN: Sandra Lavender 4050 Taylor Street, MS-242 San Diego, California 92110

Subject: I-5 North Coast Corridor (I-5 NCC) Project, Request for Agency Concurrence on the Preliminary Least Environmentally Damaging Practicable Alternative (LEDPA) and the Conceptual Mitigation Plan (Resource Enhancement and Mitigation Program)

Dear Ms. Smith:

The U.S. Army Corps of Engineers (Corps) is responding to the California Department of Transportation (Caltrans) request, dated April 29, 2013, for concurrence on the "Preliminary Least Environmentally Damaging Practicable Alternative (LEDPA)" and the "Conceptual Mitigation Plan", known as the Resource Enhancement and Mitigation Program (REMP), for the Interstate (I) 5 North Coast Corridor Project, San Diego County, California.

In accordance with the National Environmental Policy Act and Clean Water Act Section 404 Integration Process for Federal Aid Surface Transportation Projects Memorandum of Understanding (NEPA/404 MOU), you sent a request for our concurrence on the "Preliminary LEDPA" and the "Conceptual Mitigation Plan" (REMP), to complete our third checkpoint in the NEPA/404 MOU process. To support the preliminary LEDPA determination, you submitted to us a draft section 404(b)(1) alternatives analysis; and as you know, we have reviewed more than one version of the document, with the latest version provided to us by electronic mail on May 29, 2013.

The Corps concurs, based on on-going resource and regulatory agency meetings and the review of draft documents to date, that the Caltrans-identified "Preferred Alternative, 8+4 with

Figure 5.4-15: USACE Concurrence with LEDPA



-2-

Buffer", as described in the Draft Environmental Impact Report/Statement (EIR/S), and further refined in the Supplemental EIR/S to minimize impacts, is the "Preliminary LEDPA". However, this concurrence is based on Caltrans incorporating our latest changes into the draft section 404(b)(1) alternatives analysis document, which, when finalized, will provide the basis for the Corps to make a final LEDPA determination in our Record of Decision.

The Corps also concurs that the conceptual mitigation plan, known as the REMP, is adequate in establishing a framework for addressing compensatory mitigation for project-associated impacts to waters of the U.S. consistent with the included implementation schedule. Moreover, as discussed in the REMP, site-specific plans and other documents, including Habitat Mitigation and Monitoring Plans for each proposed establishment, restoration, and/or enhancement of aquatic resources, will have to be prepared and approved by the Corps and other applicable agencies prior to implementing each of the REMP's compensatory mitigation projects.

The Corps has provided early and consistent input on this proposed project and alternatives via our participation in the I-5 NCC Working Group, which includes representatives of Federal and State resource and regulatory agencies. The Corps appreciates the opportunities Caltrans has provided for reviews and feedback on this project and alternatives via the Working Group. We thank you for requesting our agreement on the preliminary LEDPA and the REMP, and we look forward to our continued partnership in concluding the NEPA/404 MOU process for this project.

If you have any questions, please contact Stephanie Hall of my staff at 213-452-3410 or via e-mail at Stephanie.J.Hall@usace.army.mil. Please refer to this letter and SPL-2004-01089-SJH in your reply.

Sincerely,

Mark D. Cohen

Deputy Chief, Regulatory Division

"Building Strong and Taking Care of People!"

Figure 5.4-15 (cont.): USACE Concurrence with LEDPA





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street San Francisco, CA 94105-3901

Manuel Sanchez Federal Highway Administration 401 B Street, Suite 800 San Diego, California 92101

JUN 1 0 2013

Subject: EPA Concurrence on the Preliminary Least Environmentally Damaging Practicable

Alternative and Conceptual Mitigation Plan for the Interstate 5 North Coast Corridor

Improvement Project

Dear Mr. Sanchez:

The U.S. Environmental Protection Agency (EPA) has reviewed the request for concurrence on the Preliminary Least Environmentally Damaging Practicable Alternative and Conceptual Mitigation Plan for the Interstate 5 North Coast Corridor Project. Our review is pursuant to the National Environmental Policy Act and Clean Water Act Section 404 Integration Process for Federal Aid Surface Transportation Projects in California (NEPA/404 MOU). EPA is both a Cooperating Agency and a "Participating Agency" (as defined in 23 USC 139) for this project.

EPA previously rated the Draft EIS and the Supplemental Draft EIS for this project as *Environmental Concerns – Insufficient Information* (EC-2), provided comments on an Administrative Draft of the Final EIS, and provided concurrence on the Purpose and Need and Range of Alternatives to be analyzed in the EIS.

Following our review of the 404(b)1 package and Mitigation Plan materials submitted, coordination at interagency meetings, and previous correspondence to date, EPA provides concurrence that the 8+4 with Buffer Alternative is the preliminary least environmentally damaging practicable alternative. EPA also concurs with the conceptual mitigation plan (Resource Enhancement and Mitigation Program).

While we are providing concurrence with the preliminary LEDPA and conceptual mitigation plan, through this letter we reiterate the importance of demonstrating compliance with EPA's 404(b)1 Guidelines through analysis of the direct, indirect and cumulative impacts to waters of the U.S. (40 CFR 230.11 (h). For unavoidable indirect impacts to waters, Caltrans must provide compensatory mitigation (40 CFR 230.10 (d). Only when this analysis has been performed can the applicant or the resource and regulatory agencies be assured that no discharge other than the practicable alternative with the least impact on the aquatic ecosystem has been selected (40 CFR 230.10(a)). We continue to recommend that FHWA and Caltrans clarify and quantify the indirect impacts to waters of the U.S., where feasible, and propose compensatory mitigation for any unavoidable, indirect impacts. The description of the approach for compensatory mitigation outlined in the Final EIS should reflect the most current description of mitigation under the Resource Enhancement and Mitigation Program.

Further, we understand that Caltrans and FHWA have been corresponding with the Army Corps of Engineers to integrate additional edits to the 404(b)1 Package and REMP. At your earliest convenience, please submit to us the final version of those documents with additional edits incorporated so that we can confirm that our concurrence is still valid.

Printed on Recycled Paper

Figure 5.4-16: USEPA Concurrence with LEDPA



Thank you for coordinating through the NEPA/404 MOU process. We look forward to continuing to work with you and Caltrans for the remainder of the environmental review and permitting process for this project. If you have any questions on our comments, please contact me at 415-947-4161 or Elizabeth Goldmann (415-972-3398), the lead reviewers for this project.

Sincerely,

Connell Dunning, Transportation Team Supervisor

Environmental Review Office

Communities and Ecosystems Division

cc via Email: Shay Lynn Harrison, California Department of Transportation

Kim Smith, California Department of Transportation John Chisholm, California Department of Transportation

Stephanie Hall, U.S. Army Corps of Engineers Susan Wynn, U.S. Fish and Wildlife Service Bryant Chesney, National Marine Fisheries Service Tami Grove, California Coastal Commission

Tim Dillingham, California Department of Fish and Game

Mike Porter, California Regional Water Quality Control Board San Diego Region

2

Figure 5.4-16 (cont.): USEPA Concurrence with LEDPA



From: Shawna Anderson [mailto:shawna@sdrp.org]

Sent: Wednesday, May 22, 2013 10:34 AM

To: Harrison, Shay Lynn M@DOT Cc: Dick Bobertz; 'Susan Carter'

Subject: North Coast Bike Trail 4(f) concurrence

Hi Shay,

The San Dieguito River Park JPA Board at their May 17 meeting concurred with the I-5 NCC Project's use of SDRP 4(f) property for the North Coast Bike Trail, with the condition that it connect to the Coast to Crest Trail and that Caltrans work with the JPA on the design details for that connection.

Please let me know if you need something more formal from us for your concurrence requirement. Thanks!

Shawna

Shawna Anderson, AICP

Principal Planner
San Dieguito River Park JPA
18372 Sycamore Creek Rd,
Escondido, CA 92025
858-674-2275, ext. 13
FAX: 858-674-2280
www.sdrp.org

Figure 5-5.1: San Dieguito River Park Concurrence on Section 4(f) Exemption



STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 11 4050 TAYLOR STREET, M.S. 242 SAN DIEGO, CA 92110 PHONE (619) 688-0100 FAX (619) 688-4237 TTY 711 www.dot.ca.gov



August 27, 2013

11-SD-5 PM: R28.4 to R55.4 EA: 235800 (1100000159) SCH#: 2004101076

Mr. Edmund Pert California Department of Fish & Wildlife South Coast Region 5 3883 Ruffin Road San Diego, CA 92123

Dear Mr. Pert:

RE: San Elijo Lagoon Potential Impacts with I-5 NCC Project

The California Department of Transportation (Caltrans) District 11, on behalf of the Federal Highway Administration (FHWA), is seeking written concurrence for potential use of a portion of the San Elijo Lagoon Ecological Reserve within the City of Encinitas along Interstate 5 (I-5) that potential use of reserve land would not alter the functions of this ecological reserve.

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966 states that a policy of the United States Government is that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. These requirements are now codified at 49 U.S.C. § 303 and 23 U.S.C. § 138. FHWA and Caltrans have concluded that the San Elijo Lagoon warrants protection under Section 4(f) as it is a publicly accessed and publicly leased recreation area.

FHWA and Caltrans have prepared a Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) and a Supplemental Draft Environmental Impact Report/Environmental Impact Statement (Supplemental Draft EIR/EIS) for the proposed I-5 North Coast Corridor Project (I-5 NCC Project). FHWA and Caltrans propose improvements to maintain or improve the existing and future traffic operations on the existing I-5 freeway from La Jolla Village Drive in San Diego to Harbor Drive in Oceanside/Camp Pendleton, extending approximately 27 miles (PM R28.4 to R55.4) along I-5. Impacts to San Elijo Lagoon were discussed in Appendix A: Resources Evaluated Relative to the Requirements of Section 4(f).

In July 2011, Caltrans identified the 8+4 Buffer Alternative (I-5 Express Lanes) as the Locally Preferred Alternative (LPA). The LPA consists of two high-occupancy vehicle (HOV)/Managed Lanes in each direction, separated by a buffer from the existing four general purpose lanes in each direction.

Figure 5-5.2: CDFW Concurrence on Section 4(f) De Minimis Finding for San Elijo Lagoon



APPLICABILITY OF SECTION 4(f)

Section 4(f) allows the USDOT to determine that certain uses of a Section 4(f) land would have no adverse effect on the protected resource. Such de minimis impacts on publicly owned parks; recreational areas of national, state or local significance; wildlife or waterfowl refuges; or lands from a historic site of national, state or local significance are defined as those that do not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) (49 U.S.C. 303[d]; 23 U.S.C. 138). When FHWA proposes to make a de minimis impact finding, it must provide an opportunity for public comment on the proposed finding (this was included in the public comment period for the I-5 NCC Project Draft EIR/EIS). In addition, the official(s) with jurisdiction over the Section 4(f) resource in question must concur, in writing, with the finding of Caltrans and FHWA (in the case of parks, recreation areas, and wildlife and waterfowl refuges) that the project would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection (23 CFR § 774.5[b]).

SAN ELIJO LAGOON ECOLOGICAL RESERVE

The San Elijo Lagoon Ecological Reserve is located within the cities of Encinitas and Solana Beach and extends inland to the community of Rancho Santa Fe. The Reserve is bordered by the Pacific Ocean to the west, and a mix of residential and undeveloped land to the east, north, and south. The entire Reserve is approximately 1,000 acres (ac) in size. It is primarily a shallow-water estuary fed by a 77-miles squared (mi²) watershed with two main tributaries, Escondido Creek and La Orilla Creek, and is divided into a west, central, and eastern basin by Highway 101, the railway, and I-5. It contains a diverse habitat with six plant communities including coastal strand, salt marsh, freshwater marsh, riparian scrub, coastal sage scrub, and mixed chaparral. The habitat supports a variety of plant and wildlife species.

The Reserve is owned jointly by the California Department of Fish and Wildlife (CDFW), the County of San Diego Department of Parks and Recreation (DPR) and the San Elijo Lagoon Conservancy (SELC). All three agencies have an agreement to operate San Elijo Lagoon as a State Ecological Reserve under the administration of the DPR. The boundary of the Reserve is contiguous with Caltrans right-of-way where I-5 separates the eastern and central basins. The Reserve includes over 8 km (7 mi) of hiking trails open to the public. These trails can be reached from the north end of Rios Avenue, Holmwood Lane, Solana Hills Drive, Santa Inez Drive, Santa Carina Drive, and Santa Helena Drive on the south side of the lagoon in Solana Beach, and along El Camino Real at La Orilla Creek in the community of Rancho Santa Fe at the east end.

Figure 5-5.2 (cont.): CDFW Concurrence on Section 4(f) De Minimis Finding for San Elijo Lagoon



The trails are designated for hiking-only in the Central Basin, and both equestrian and hiking in East Basin. The multi-use trail system is restricted to the East Basin, as the riprap slope protection under the I-5 bridge at Manchester Avenue prevents equestrian passage into the West Basin. A Nature Center, located at 2710 Manchester Avenue in Encinitas on the northwest side of the Reserve, provides county ranger offices, museum-quality exhibits, an observation deck, tables and chairs, a parking lot, restrooms, drinking water, and a 1 mile loop trail.

Visitor usage of the Reserve is estimated between 100,000 to 120,000 visitor use days per year (entry onto the Reserve is equal to one visitor use per day). The Nature Center visitor usage is approximately 55,000 to 65,000 visitor use days per year. Visitors are primarily residents of the surrounding neighborhoods, and jogging is popular along the southern trails. School field trips are held at the Nature Center as well as the Rios and Santa Carina trailheads. The park's status as a publicly owned ecological Reserve and recreation area qualifies the Reserve as a resource subject to protection under Section 4(f).

Impacts with 8+4 with Buffer Alternative (Locally Preferred Alternative)

Per the 2050 Regional Transportation Plan, implementation of the \$+4 with Buffer Alternative within the San Elijo Lagoon would occur between years 2015 to 2020. This phase includes the San Elijo bridge replacement, I-5 North Coast (NC) Bike Trail, and proposed Community Enhancement trails. See the enclosure. Permanent impacts from these improvements would use approximately 0.23 acres with 0.56 acres of temporary impacts for a temporary construction easement. At project completion, the temporary construction easement would re-establish the maintenance and pedestrian trail. The total area for use consists of degraded coastal sage scrub habitat, and is approximately 0.079% of the total Reserve area. Approximately 0.61 ac of this use would occur on property owned by the County of San Diego, while the remaining 0.18 ac would occur on property owned by the CDFW. See the enclosed figure. These minor land uses would not alter or affect any recreation activities at the lagoon. Coordination with the CDFW, DPR, and the SELC will continue to clarify the proposed use.

Proposed De Minimis Finding

Under any I-5 NCC Project alternative, the quantity of Reserve land proposed for use is extremely small at 0.79 acres. Access to existing trailheads and designated trails would remain open, and after project implementation would be enhanced. The visual character of the Reserve would not be measurably altered by the freeway widening. The existing noise levels in the Reserve range from 60 dBA to 67 dBA. With the project, future noise levels at the Reserve are projected to increase approximately 1 dBA from the existing noise levels. This 1 dBA increase would not be perceptible to the human ear. The increase in noise would not substantially

Figure 5-5.2 (cont.): CDFW Concurrence on Section 4(f) De Minimis Finding for San Elijo Lagoon



increase the potential for noise to impact sensitive species. Therefore, increases in traffic-related noise would not be noticeable to park users and would not impair the wildlife habitat functions of the Reserve.

Areas of natural vegetation disturbed through construction would be restored with native plant species and mitigated at ratios agreed upon by the resource agencies as part of the overall mitigation plan for the proposed project. In recognition of the unique opportunities and value of comprehensive lagoon restoration activities for corridor lagoons, the mitigation plan called the Resource Enhancement Mitigation Program (REMP) includes large-scale lagoon ecosystem restoration and enhancement mitigation opportunities, which will result in significant ecological lift to the lagoon system. The mitigation opportunity includes potential funding for a large-scale lagoon restoration program in full for San Elijo Lagoon, which would be in addition to funds already contributed to previous and ongoing planning and technical evaluation activities necessary to facilitate and implement these lagoon restoration programs. Large-scale lagoon restoration in San Elijo Lagoon may include, but is not limited to, enhancement and restoration (both types) of wetland and other aquatic resources in the associated Lagoons. The intent of the large-scale lagoon restoration funding is to improve the ecological health and hydrological connectivity and to enhance critical coastal resources and habitats. The degraded upland coastal sage community located within the area for de minimis is currently included within the mitigation plan. The upland habitat would be mitigated outside of the lagoon at Dean and Deer Canyon mitigation sites.

Overall, it is expected that use of up to 0.23 acres for a permanent impact and 0.56 ac for a temporary construction easement of Reserve land would not adversely affect any of the activities, features, or attributes of the Reserve that qualify the resource for protection under Section 4(f) and is proposed as de minimis.

Coordination between Caltrans/FHWA and the California Department of Fish and Wildlife

In correspondence received from the CDFW during the public comment period for the Draft Environmental Impact Report / Environmental Impact Statement for the Interstate 5 North Coast Corridor Project and the comment period for the Supplemental Draft Environmental Impact Report / Environmental Impact Statement for the Interstate 5 North Coast Corridor Project, the CDFW did not protest regarding the de minimis findings made by Caltrans/FHWA.

Figure 5-5.2 (cont.): CDFW Concurrence on Section 4(f) De Minimis Finding for San Elijo Lagoon



On April 3, 2013, Caltrans, on behalf of FHWA, met with CDFW, DPR, and SELC.

Since the project design is still in the preliminary phases, further coordination with the CDFW, DPR, and SELC will occur regarding the following:

- Continuing discussions on separation between pedestrians and bicyclists.
- Ensuring that access control coordination for signage and gates within the Reserve is continued. In particular, Solana Hills Drive and the NC Bike Trail.
- Continuing discussions in which existing trails should be tied into the bench trail under the south abutment.
- Continuing discussions to ensure trails and maintenance roads are open for use during construction.
- Working with all stakeholders on design details (fencing, retaining walls, signage, access, pavement surface, plants, and maintenance).
- Providing information on the cut and fill volumes associated with impacts to San Elijo triggered by Section 4(f).
- Continuing discussions regarding right-of-way exchange.

Furthermore, Caltrans acknowledges the CDFW, DPR, and SELC may identify other concerns besides those listed above. For that reason, Caltrans looks forward to continued coordination throughout the project lifecycle.

Caltrans is now requesting your written concurrence in this de minimis determination, as required under Section 4(f) (49 USC 303[d]; 23 USC 138[d]). A signature block is provided at the bottom of this letter for your convenience. If you have any questions, please contact Shay Lynn Harrison, Chief, Environmental Analysis, Branch C, at (619) 688-0190.

Sincerely,

BRUCE L. APRIL

Deputy District Director, Environmental

Enclosure

c: Shay Lynn M. Harrison, Chief, Environmental Analysis, Branch C

Figure 5-5.2 (cont.): CDFW Concurrence on Section 4(f) De Minimis Finding for San Elijo Lagoon



California De	partment of F	ish & Wildlife	Service Con-	currence with	De Minimis I	mpact	
Camorana De	Fi	nding for San E	lijo Lagoon	Reserve	De Jaminis I	mpact	
The signature belo proposed Interstate affect the activities protection under S	5 North Coas s, features, and	t Corridor Proje attributes that q	ct 8+4 Buffer ualify the pro	Alternative w	ould not adver	sely	
21	1	21_		C.2	0-13		
Mr. Edmund Per Regional Manag California Depar	er	e witnis.		DATE	2-152		
South Coast Reg	ion 5	e winding					

Figure 5-5.2 (cont.): CDFW Concurrence on Section 4(f) De Minimis Finding for San Elijo Lagoon



STATE OF CALIFORNIA-CALIFORNIA STATE TRANSPORTATION AGENCY.

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 11 4050 TAYLOR STREET, M.S. 242 SAN DIEGO, CA 92110 PHONE (619) 688-0100 FAX (619) 688-4237 TTY 711 www.dolca.gov



Flex your power! Be energy efficient!

August 1, 2013

11-SD-5 PM: R28.4 to R55.4 EA: 235800 (1100000159) SCH#: 2004101076

Mr. Brian Albright, Director County of San Diego Department of Parks and Recreation 5500 Overland Avenue, Suite 410 San Diego, CA 92123

Dear Mr. Albright:

RE: San Elijo Lagoon Potential Impacts with I-5 NCC Project

The California Department of Transportation (Caltrans) District 11, on behalf of the Federal Highway Administration (FHWA), is seeking written concurrence for potential use of a portion of the San Elijo Lagoon Ecological Reserve within the City of Encinitas along Interstate 5 (I-5) that potential use of reserve land would not alter the functions of this ecological reserve.

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966 states that a policy of the United States Government is that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. These requirements are now codified at 49 U.S.C. § 303 and 23 U.S.C. § 138. FHWA and Caltrans have concluded that the San Elijo Lagoon warrants protection under Section 4(f) as it is a publicly accessed and publicly leased recreation area.

FHWA and Caltrans have prepared a Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) and a Supplemental Draft Environmental Impact Report/Environmental Impact Statement (Supplemental Draft EIR/EIS) for the proposed I-5 North Coast Corridor Project (I-5 NCC Project). FHWA and Caltrans propose improvements to maintain or improve the existing and future traffic operations on the existing I-5 freeway from La Jolla Village Drive in San Diego to Harbor Drive in Oceanside/Camp Pendleton, extending approximately 27 miles (PM R28.4 to R55.4) along I-5. Impacts to San Elijo Lagoon were discussed in Appendix A: Resources Evaluated Relative to the Requirements of Section 4(f).

Figure 5-5.3: County of San Diego Parks and Recreation Concurrence on Section 4(f)

De Minimis Finding for San Elijo Lagoon



In July 2011, Caltrans identified the 8+4 Buffer Alternative (I-5 Express Lanes) as the Locally Preferred Alternative (LPA). The LPA consists of two high-occupancy vehicle (HOV)/Managed Lanes in each direction, separated by a buffer from the existing four general purpose lanes in each direction.

APPLICABILITY OF SECTION 4(f)

Section 4(f) allows the USDOT to determine that certain uses of a Section 4(f) land would have no adverse effect on the protected resource. Such *de minimis* impacts on publicly owned parks; recreational areas of national, state or local significance; wildlife or waterfowl refuges; or lands from a historic site of national, state or local significance are defined as those that do not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) (49 U.S.C. 303[d]; 23 U.S.C. 138). When FHWA proposes to make a *de minimis* impact finding, it must provide an opportunity for public comment on the proposed finding (this was included in the public comment period for the I-5 NCC Project Draft EIR/EIS). In addition, the official(s) with jurisdiction over the Section 4(f) resource in question must concur, in writing, with the finding of Caltrans and FHWA (in the case of parks, recreation areas, and wildlife and waterfowl refuges) that the project would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection (23 CFR § 774.5[b]).

SAN ELIJO LAGOON ECOLOGICAL RESERVE

The San Elijo Lagoon Ecological Reserve is located within the cities of Encinitas and Solana Beach and extends inland to the community of Rancho Santa Fe. The Reserve is bordered by the Pacific Ocean to the west, and a mix of residential and undeveloped land to the east, north, and south. The entire Reserve is approximately 1,000 acres (ac) in size. It is primarily a shallow-water estuary fed by a 77-miles squared (mi²) watershed with two main tributaries, Escondido Creek and La Orilla Creek, and is divided into a west, central, and eastern basin by Highway 101, the railway, and I-5. It contains a diverse habitat with six plant communities including coastal strand, salt marsh, freshwater marsh, riparian scrub, coastal sage scrub, and mixed chaparral. The habitat supports a variety of plant and wildlife species.

The Reserve is owned jointly by the California Department of Fish and Wildlife (CDFW), the County of San Diego Department of Parks and Recreation (DPR) and the San Elijo Lagoon Conservancy (SELC). All three agencies have an agreement to operate San Elijo Lagoon as a State Ecological Reserve under the administration of the DPR. The boundary of the Reserve is contiguous with Caltrans right-of-way where I-5 separates the eastern and central basins.

Figure 5-5.3 (cont.): County of San Diego Parks and Recreation Concurrence on Section 4(f)

De Minimis Finding for San Elijo Lagoon



The Reserve includes over 8 km (7 mi) of hiking trails open to the public. These trails can be reached from the north end of Rios Avenue, Holmwood Lane, Solana Hills Drive, Santa Inez Drive, Santa Carina Drive, and Santa Helena Drive on the south side of the lagoon in Solana Beach, and along El Camino Real at La Orilla Creek in the community of Rancho Santa Fe at the east end. The trails are designated for hiking-only in the Central Basin, and both equestrian and hiking in East Basin. The multi-use trail system is restricted to the East Basin, as the riprap slope protection under the I-5 bridge at Manchester Avenue prevents equestrian passage into the West Basin. A Nature Center, located at 2710 Manchester Avenue in Encinitas on the northwest side of the Reserve, provides county ranger offices, museum-quality exhibits, an observation deck, tables and chairs, a parking lot, restrooms, drinking water, and a 1 mile loop trail.

Visitor usage of the Reserve is estimated between 100,000 to 120,000 visitor use days per year (entry onto the Reserve is equal to one visitor use per day). The Nature Center visitor usage is approximately 55,000 to 65,000 visitor use days per year. Visitors are primarily residents of the surrounding neighborhoods, and jogging is popular along the southern trails. School field trips are held at the Nature Center as well as the Rios and Santa Carina trailheads. The park's status as a publicly owned ecological Reserve and recreation area qualifies the Reserve as a resource subject to protection under Section 4(f).

Impacts with 8+4 with Buffer Alternative (Locally Preferred Alternative)

Per the 2050 Regional Transportation Plan, implementation of the 8+4 with Buffer Alternative within the San Elijo Lagoon would occur between years 2015 to 2020. This phase includes the San Elijo bridge replacement, I-5 North Coast (NC) Bike Trail, and proposed Community Enhancement trails. See the enclosure. Permanent impacts from these improvements would use approximately 0.23 acres with 0.56 acres of temporary impacts for a temporary construction easement. At project completion, the temporary construction easement would re-establish the maintenance and pedestrian trail. The total area for use consists of degraded coastal sage scrub habitat, and is approximately 0.079% of the total Reserve area. Approximately 0.61 ac of this use would occur on property owned by the County of San Diego, while the remaining 0.18 ac would occur on property owned by the CDFW. See the enclosed figure. These minor land uses would not alter or affect any recreation activities at the lagoon. Coordination with the CDFW, DPR, and the SELC will continue to clarify the proposed use.

Proposed De Minimis Finding

Under any I-5 NCC Project alternative, the quantity of Reserve land proposed for use is extremely small at 0.79 acres. Access to existing trailheads and designated trails would remain open, and after project implementation would be enhanced. The visual character of the Reserve

Figure 5-5.3 (cont.): County of San Diego Parks and Recreation Concurrence on Section 4(f)

De Minimis Finding for San Elijo Lagoon



would not be measurably altered by the freeway widening. The existing noise levels in the Reserve range from 60 dBA to 67 dBA. With the project, future noise levels at the Reserve are projected to increase approximately 1 dBA from the existing noise levels. This 1 dBA increase would not be perceptible to the human ear. The increase in noise would not substantially increase the potential for noise to impact sensitive species. Therefore, increases in traffic-related noise would not be noticeable to park users and would not impair the wildlife habitat functions of the Reserve.

Areas of natural vegetation disturbed through construction would be restored with native plant species and mitigated at ratios agreed upon by the resource agencies as part of the overall mitigation plan for the proposed project. In recognition of the unique opportunities and value of comprehensive lagoon restoration activities for corridor lagoons, the mitigation plan called the Resource Enhancement Mitigation Program (REMP) includes large-scale lagoon ecosystem restoration and enhancement mitigation opportunities, which will result in significant ecological lift to the lagoon system. The mitigation opportunity includes potential funding for a large-scale lagoon restoration program in full for San Elijo Lagoon, which would be in addition to funds already contributed to previous and ongoing planning and technical evaluation activities necessary to facilitate and implement these lagoon restoration programs. Large-scale lagoon restoration in San Elijo Lagoon may include, but is not limited to, enhancement and restoration (both types) of wetland and other aquatic resources in the associated Lagoons. The intent of the large-scale lagoon restoration funding is to improve the ecological health and hydrological connectivity and to enhance critical coastal resources and habitats. The degraded upland coastal sage community located within the area for de minimis is currently included within the mitigation plan. The upland habitat would be mitigated outside of the lagoon at Dean and Deer Canyon mitigation sites.

Overall, it is expected that use of up to 0.23 acres for a permanent impact and 0.56 ac for a temporary construction easement of Reserve land would not adversely affect any of the activities, features, or attributes of the Reserve that qualify the resource for protection under Section 4(f) and is proposed as *de minimis*.

Coordination and Communication between Caltrans/FHWA and the County of San Diego

Specific responses to each comment in your November 23, 2010, letter from DPR to Caltrans regarding the I-5 NCC Project DEIS will be included in the Final Environmental Impact Statement (FEIS). The DPR has stated it would like additional information prior to concurrence with the proposed *de minimis* finding. Summaries of the more substantive issues raised in relation to this issue, and their responses, are as follows:

Figure 5-5.3 (cont.): County of San Diego Parks and Recreation Concurrence on Section 4(f)

De Minimis Finding for San Elijo Lagoon



Trailheads at Solana Hills Drive and North Rios Avenue in City of Solana Beach

The trailhead was described as being a rather minor access point and it was stated Issues that enhancements at the more heavily used North Rios Avenue trailhead should be explored instead. Questions of ownership and maintenance were also raised along with confirmation that an easement road would still be accessible. There were also concerns over the nature of proposed lighting, of a retaining wall, and over erosion control at the North Rios Avenue trailhead.

The locations of proposed community enhancements were discussed with various Response stakeholders, with improvements to the existing trailhead prioritized by the City of Solana Beach, which would manage the proposed amenities. Improvements to other access points and various enhancements, including means of controlling erosion, could be a point of the ongoing stakeholder discussion. Easement road access would be maintained. Lighting would be provided for safety along the I-5 Bike Trail connected to the I-5 freeway, but would be shielded and directed away from the Reserve. Unless lighting is required by the cities, no lighting for the trails within the Reserve is anticipated. Daytime lighting of undercrossings may be required on some trails, though nighttime lighting is not proposed for trails within the Reserve, which would help discourage nighttime use. The purpose of the retaining wall is to minimize encroachment onto adjacent habitat, and it would need to be 30-40 feet tall in order to do so. The freeway users would see the face of the wall. The trail users would be above the retaining wall. In addition, planting to screen the wall is a commitment as part of project design, diminishing perceived incompatibility with the character of the Reserve. Caltrans is in ongoing, extensive coordination with the California Coastal Commission (CCC), and only native plant species would be planted. The Design Guidelines for I-5 strives to be consistent with the character of the adjacent community landscape. Therefore, Caltrans would coordinate with the stakeholders and the CCC to determine if non-native drought tolerant plants would also be feasible to screen the retaining walls in certain areas.

Manchester Avenue Pedestrian Bridge and Trail, City of Encinitas

Concerns over nighttime lighting impacts on wildlife and on perceived security issues were raised at this location, along with trail and retaining wall design. Potential public safety and access problems in an adjacent area were also raised.

The Manchester Avenue pedestrian bridge and suspended trail would comprise part of the regional I-5 North Coast Bike Trail to provide for and improve public access. Lighting would be provided along Manchester Avenue and the bridge for safety, but would be shielded to help focus light on the trail and avoid the Reserve. The use of retaining walls would

Figure 5-5.3 (cont.): County of San Diego Parks and Recreation Concurrence on Section 4(f) De Minimis Finding for San Elijo Lagoon



reduce the size of the impacted area and, along with fencing, help keep users out of more sensitive areas. In certain locations signage would also be used to discourage access into sensitive areas and to advise users that the Reserve is closed after dark. The bike trail is not within the Reserve. Requested access points between the I-5 Bike Trail and the Reserve would be coordinated with the DPR, DFW, and SELC to install features that restrict bicycle access to the reserve trails. Co-located bike/pedestrian trails would consist of paved surface for bikes and an adjacent soft surface for pedestrians. The pedestrian trail along the west side of the freeway south of the lagoon within the Reserve would be decomposed granite. The toe of the slope would be revegetated with salt marsh species and bioswales would be kept out of wetland.

Retaining walls adjacent to the proposed trail along the south side of the lagoon Issues 2e) do not fit the natural character of the lagoon and may interfere with proposed restoration efforts. Please design the trail such that a retaining wall is not required.

Response The retaining wall proposed on the south side of the lagoon would support the trail mid-slope rather than down at toe of slope where it is currently sited. The purpose of the wall is to minimize slope spread, separate trail users from more sensitive portions of the lagoon such as areas along the water edge, and retain construction and use impacts to within Caltrans right-of-way. Lack of a retaining wall would result in additional environmental impacts and is therefore currently not under consideration for final design. The retaining wall is being developed in coordination with the restoration efforts.

Trail improvements on the west side of I-5 should extend the length of the berm to connect to the existing trail along the south shore of the lagoon. A current foot trail at the toe of the slope should be removed during construction of the bio-swale, and the area returned to salt marsh.

Response A retaining wall would be installed to support a 12-foot-wide paved trail along the south side of the lagoon for bicycles and pedestrians. Fencing and other methods, as well as signage, would be used to keep bicycles on the approved trail and out of the reserve. A pedestrian trail would also be continued on the east side of the lagoon. This would eliminate the need for the existing trail at the toe of slope in this area and provide additional area for restoration. The impact area at the toe of the slope will be revegetated with salt marsh species. The bioswales will not be placed within the wetland.

Figure 5-5.3 (cont.): County of San Diego Parks and Recreation Concurrence on Section 4(f) De Minimis Finding for San Elijo Lagoon



Affected Environment, Consequences, and Avoidance, Minimization, and Mitigation Measures

Issues It was stated that the EIR/EIS be revised to include analysis of its relationship to various regional trails, including the California Coastal Trail, the Coast to Crest Trail, and the Trans County Trail. Mention was made that regulatory language citations may have been in error, that there were discrepancies in certain acreage impacts reported, and that there was a need for a map showing sensitive plant locations for the San Elijo Lagoon.

Response Project elements including various pedestrian and bicycle trail enhancements would be expected to improve the movement of users throughout the corridor, including those traveling a local, short distance and those traveling further, and is consistent with goals for the area. By facilitating improved pedestrian and bicycle movement along the project area, access to other local or regional trails is also enhanced whether or not these other trails are contiguous with trails along the I-5 corridor. This results from the reduction or elimination of non-contiguous segments that would otherwise force users onto surface streets, and thereby improves movement throughout the region. Regarding regulatory language, the code cited is an implementing code for the original codification at 23 USC 303, and is cited as part of the Caltrans template for CEQA/NEPA environmental documents. The refined 8+4 Buffer Alternative is identified in the FEIR/EIS as the Preferred Alternative, and the amount of impact is anticipated to be 0.18 acres, with the numbers in Section 3.1.3 and Appendix A now matching. Additionally, a figure showing sensitive plant species on San Elijo Lagoon slopes was included as Figure 3.19.1, Sensitive Plant Locations, in the DEIR/EIS and is retained in the FEIR/EIS.

Appendix A – Resources Evaluated Relative to 4(f), Section 4.2 San Elijo Lagoon Ecological Reserve

Issues The I-5 NCC project's trail improvements to the existing informal trail under the I-5 bridge would represent a more formal accommodation of this trail that connects with other trails on the berms running parallel to I-5 along the east and west sides, but this trail is not currently maintained by DPR and it was requested that Caltrans maintenance responsibility be specified. Also, it was stated that the City of Encinitas does not have jurisdiction in accordance with Section 774.17 23 USC 774, and that instead jurisdiction lies with the agencies that own or administer the property which is, in this case, the County of San Diego. It was stated that while it appeared mitigation measures might qualify the project for a *de minimis* finding, no replacement parkland had been proposed, DPR had not been consulted, and that DPR would like a meeting with Caltrans to discuss avoidance and mitigation measures in order to reassure the County that *de minimis* standards are met.

Figure 5-5.3 (cont.): County of San Diego Parks and Recreation Concurrence on Section 4(f)

De Minimis Finding for San Elijo Lagoon



Response Maintenance for any trail within the San Elijo Conservancy including the pedestrian/bike bridge would be the responsibility of the DPR, City, or the SELC as part of a Maintenance Agreement reached prior to construction. Caltrans will continue to coordinate with agencies having jurisdiction over Section 4(f) properties in regards to impacts and to mitigation in order to help reduce or avoid them. The enhancements in this area would be expected to be neutral or even beneficial relative to existing conditions. Project footprint effects on habitat would be addressed through the project mitigation plan and associated Project Works Plan / Transportation and Resource Enhancement Program (PWP/TREP). Also, it should be noted that replacement parkland is not required under Section 4(f), though it may be a part of Section 6(f) analysis.

On April 3, 2013, Caltrans, on behalf of FHWA, met with CDFW, DPR, and SELC.

Since the project design is still in the preliminary phases, further coordination with the CDFW, DPR, and SELC will occur regarding the following:

- Continuing discussions on separation between pedestrians and bicyclists.
- Ensuring that access control coordination for signage and gates within the Reserve is continued. In particular, Solana Hills Drive and the NC Bike Trail.
- Continuing discussions in which existing trails should be tied into the bench trail under the south abutment.
- Continuing discussions to ensure trails and maintenance roads are open for use during construction.
- Working with all stakeholders on design details (fencing, retaining walls, signage, access, pavement surface, plants, and maintenance).
- Providing information on the cut and fill volumes associated with impacts to San Elijo triggered by Section 4(f).
- Continuing discussions regarding right-of-way exchange.

Furthermore, Caltrans acknowledges the CDFW, DPR, and SELC may identify other concerns besides those listed above. For that reason, Caltrans looks forward to continued coordination throughout the project lifecycle.

Figure 5-5.3 (cont.): County of San Diego Parks and Recreation Concurrence on Section 4(f)

De Minimis Finding for San Elijo Lagoon



Caltrans is now requesting your written concurrence in this *de minimis* determination, as required under Section 4(f) (49 U.S.C. 303[d]; and 23 U.S.C. 138). A signature block is provided at the bottom of this letter for your convenience. If you have any questions, please contact Shay Lynn Harrison, Chief, Environmental Analysis, Branch C, at (619) 688-0190.

Sincerely,

BRUCE L. APRIL

Deputy District Director, Environmental

Enclosures

c: Shay Lynn M. Harrison, Chief, Environmental Analysis, Branch C

Figure 5-5.3 (cont.): County of San Diego Parks and Recreation Concurrence on Section 4(f)

De Minimis Finding for San Elijo Lagoon



County of San Diego, Parks and Recreation Concurrence with De Minimis Impact Finding for San Elijo Lagoon Reserve

The signature below represents written concurrence on the de minimis impact finding that the proposed Interstate 5 North Coast Corridor Project 8+4 Buffer Alternative would not adversely affect the activities, features, and attributes that qualify the property, San Elijo Lagoon, for protection under Section 4(f) within the County of San Diego.

9/10/13

Mr. Brian Albright

Director

Parks and Recreation, County of San Diego

County of San Diego Parks and Recreation Concurrence on Section 4(f) Figure 5-5.3 (cont.): De Minimis Finding for San Elijo Lagoon



STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 11 4050 TAYLOR STREET, M.S. 242 SAN DIEGO, CA 92110 PHONE (619) 688-0100 FAX (619) 688-4237 TTY 711 www.dotca.gov



Flex your power
Be energy efficient

August 6, 2013

11-SD-5 PM: R28.4 to R55.4 EA: 235800 (1100000159) SCH#: 2004101076

Mr. Doug Gibson San Elijo Lagoon Conservancy 2049 San Elijo Avenue Cardiff-by-the-Sea, CA 92007

Dear Mr. Gibson:

RE: San Elijo Lagoon Potential Impacts with I-5 NCC Project

The California Department of Transportation (Caltrans) District 11, on behalf of the Federal Highway Administration (FHWA), is seeking written concurrence for potential use of a portion of the San Elijo Lagoon Ecological Reserve within the City of Encinitas along Interstate 5 (I-5) that potential use of reserve land would not alter the functions of this ecological reserve.

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966 states that a policy of the United States Government is that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. These requirements are now codified at 49 U.S.C. § 303 and 23 U.S.C. § 138. FHWA and Caltrans have concluded that the San Elijo Lagoon warrants protection under Section 4(f) as it is a publicly accessed and publicly leased recreation area.

FHWA and Caltrans have prepared a Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) and a Supplemental Draft Environmental Impact Report/Environmental Impact Statement (Supplemental Draft EIR/EIS) for the proposed I-5 North Coast Corridor Project (I-5 NCC Project). FHWA and Caltrans propose improvements to maintain or improve the existing and future traffic operations on the existing I-5 freeway from La Jolla Village Drive in San Diego to Harbor Drive in Oceanside/Camp Pendleton, extending approximately 27 miles (PM R28.4 to R55.4) along I-5. Impacts to San Elijo Lagoon were discussed in Appendix A: Resources Evaluated Relative to the Requirements of Section 4(f).

In July 2011, Caltrans identified the 8+4 Buffer Alternative (I-5 Express Lanes) as the Locally Preferred Alternative (LPA). The LPA consists of two high-occupancy vehicle (HOV)/Managed Lanes in each direction, separated by a buffer from the existing four general purpose lanes in each direction.

Figure 5-5.4: San Elijo Lagoon Conservancy Concurrence on Section 4(f) *De Minimis* Finding for San Elijo Lagoon



Mr. Doug Gibson August 6, 2013 Page 2

APPLICABILITY OF SECTION 4(f)

Section 4(f) allows the USDOT to determine that certain uses of a Section 4(f) land would have no adverse effect on the protected resource. Such *de minimis* impacts on publicly owned parks; recreational areas of national, state or local significance; wildlife or waterfowl refuges; or lands from a historic site of national, state or local significance are defined as those that do not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) (49 U.S.C. 303[d]; 23 U.S.C. 138). When FHWA proposes to make a *de minimis* impact finding, it must provide an opportunity for public comment on the proposed finding (this was included in the public comment period for the I-5 NCC Project Draft EIR/EIS). In addition, the official(s) with jurisdiction over the Section 4(f) resource in question must concur, in writing, with the finding of Caltrans and FHWA (in the case of parks, recreation areas, and wildlife and waterfowl refuges) that the project would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection (23 CFR § 774.5[b]).

SAN ELIJO LAGOON ECOLOGICAL RESERVE

The San Elijo Lagoon Ecological Reserve is located within the cities of Encinitas and Solana Beach and extends inland to the community of Rancho Santa Fe. The Reserve is bordered by the Pacific Ocean to the west, and a mix of residential and undeveloped land to the east, north, and south. The entire Reserve is approximately 1,000 acres (ac) in size. It is primarily a shallow-water estuary fed by a 77-miles squared (mi²) watershed with two main tributaries, Escondido Creek and La Orilla Creek, and is divided into a west, central, and eastern basin by Highway 101, the railway, and I-5. It contains a diverse habitat with six plant communities including coastal strand, salt marsh, freshwater marsh, riparian scrub, coastal sage scrub, and mixed chaparral. The habitat supports a variety of plant and wildlife species.

The Reserve is owned jointly by the California Department of Fish and Wildlife (CDFW), the County of San Diego Department of Parks and Recreation (DPR) and the San Elijo Lagoon Conservancy (SELC). All three agencies have an agreement to operate San Elijo Lagoon as a State Ecological Reserve under the administration of the DPR. The boundary of the Reserve is contiguous with Caltrans right-of-way where I-5 separates the eastern and central basins. The Reserve includes over 8 km (7 mi) of hiking trails open to the public. These trails can be reached from the north end of Rios Avenue, Holmwood Lane, Solana Hills Drive, Santa Inez Drive, Santa Carina Drive, and Santa Helena Drive on the south side of the lagoon in Solana Beach, and along El Camino Real at La Orilla Creek in the community of Rancho Santa Fe at the east end.

Figure 5-5.4 (cont.): San Elijo Lagoon Conservancy Concurrence on Section 4(f) *De Minimis* Finding for San Elijo Lagoon



Mr. Doug Gibson August 6, 2013 Page 3

The trails are designated for hiking-only in the Central Basin, and both equestrian and hiking in East Basin. The multi-use trail system is restricted to the East Basin, as the riprap slope protection under the I-5 bridge at Manchester Avenue prevents equestrian passage into the West Basin. A Nature Center, located at 2710 Manchester Avenue in Encinitas on the northwest side of the Reserve, provides county ranger offices, museum-quality exhibits, an observation deck, tables and chairs, a parking lot, restrooms, drinking water, and a 1 mile loop trail.

Visitor usage of the Reserve is estimated between 100,000 to 120,000 visitor use days per year (entry onto the Reserve is equal to one visitor use per day). The Nature Center visitor usage is approximately 55,000 to 65,000 visitor use days per year. Visitors are primarily residents of the surrounding neighborhoods, and jogging is popular along the southern trails. School field trips are held at the Nature Center as well as the Rios and Santa Carina trailheads. The park's status as a publicly owned ecological Reserve and recreation area qualifies the Reserve as a resource subject to protection under Section 4(f).

Impacts with 8+4 with Buffer Alternative (Locally Preferred Alternative)

Per the 2050 Regional Transportation Plan, implementation of the 8+4 with Buffer Alternative within the San Elijo Lagoon would occur between years 2015 to 2020. This phase includes the San Elijo bridge replacement, I-5 North Coast (NC) Bike Trail, and proposed Community Enhancement trails. See the enclosure. Permanent impacts from these improvements would use approximately 0.23 acres with 0.56 acres of temporary impacts for a temporary construction easement. At project completion, the temporary construction easement would re-establish the maintenance and pedestrian trail. The total area for use consists of degraded coastal sage scrub habitat, and is approximately 0.079% of the total Reserve area. Approximately 0.61 ac of this use would occur on property owned by the County of San Diego, while the remaining 0.18 ac would occur on property owned by the CDFW. See the enclosed figure. These minor land uses would not alter or affect any recreation activities at the lagoon. Coordination with the CDFW, DPR, and the SELC will continue to clarify the proposed use.

Proposed De Minimis Finding

Under any I-5 NCC Project alternative, the quantity of Reserve land proposed for use is extremely small at 0.79 acres. Access to existing trailheads and designated trails would remain open, and after project implementation would be enhanced. The visual character of the Reserve would not be measurably altered by the freeway widening. The existing noise levels in the Reserve range from 60 dBA to 67 dBA. With the project, future noise levels at the Reserve are projected to increase approximately 1 dBA from the existing noise levels. This 1 dBA increase would not be perceptible to the human ear. The increase in noise would not substantially

Figure 5-5.4 (cont.): San Elijo Lagoon Conservancy Concurrence on Section 4(f) De Minimis Finding for San Elijo Lagoon



Mr. Doug Gibson August 6, 2013 Page 4

increase the potential for noise to impact sensitive species. Therefore, increases in traffic-related noise would not be noticeable to park users and would not impair the wildlife habitat functions of the Reserve.

Areas of natural vegetation disturbed through construction would be restored with native plant species and mitigated at ratios agreed upon by the resource agencies as part of the overall mitigation plan for the proposed project. In recognition of the unique opportunities and value of comprehensive lagoon restoration activities for corridor lagoons, the mitigation plan called the Resource Enhancement Mitigation Program (REMP) includes large-scale lagoon ecosystem restoration and enhancement mitigation opportunities, which will result in significant ecological lift to the lagoon system. The mitigation opportunity includes potential funding for a large-scale lagoon restoration program in full for San Elijo Lagoon, which would be in addition to funds already contributed to previous and ongoing planning and technical evaluation activities necessary to facilitate and implement these lagoon restoration programs. Large-scale lagoon restoration in San Elijo Lagoon may include, but is not limited to, enhancement and restoration (both types) of wetland and other aquatic resources in the associated Lagoons. The intent of the large-scale lagoon restoration funding is to improve the ecological health and hydrological connectivity and to enhance critical coastal resources and habitats. The degraded upland coastal sage community located within the area for de minimis is currently included within the mitigation plan. The upland habitat would be mitigated outside of the lagoon at Dean and Deer Canyon mitigation sites.

Overall, it is expected that use of up to 0.23 acres for a permanent impact and 0.56 ac for a temporary construction easement of Reserve land would not adversely affect any of the activities, features, or attributes of the Reserve that qualify the resource for protection under Section 4(f) and is proposed as *de minimis*.

Coordination between Caltrans/FHWA and the San Elijo Lagoon Conservancy

In correspondence received from the SELC during the public comment period for the Draft Environmental Impact Report / Environmental Impact Statement for the Interstate 5 North Coast Corridor Project and the comment period for the Supplemental Draft Environmental Impact Report / Environmental Impact Statement for the Interstate 5 North Coast Corridor Project, the SELC did not protest regarding the *de minimis* findings made by Caltrans/FHWA.

Figure 5-5.4 (cont.): San Elijo Lagoon Conservancy Concurrence on Section 4(f) *De Minimis* Finding for San Elijo Lagoon



Mr. Doug Gibson August 6, 2013 Page 5

On April 3, 2013, Caltrans, on behalf of FHWA, met with CDFW, DPR, and SELC.

Since the project design is still in the preliminary phases, further coordination with the CDFW, DPR, and SELC will occur regarding the following:

- · Continuing discussions on separation between pedestrians and bicyclists.
- Ensuring that access control coordination for signage and gates within the Reserve is continued. In particular, Solana Hills Drive and the NC Bike Trail.
- Continuing discussions in which existing trails should be tied into the bench trail under the south abutment.
- Continuing discussions to ensure trails and maintenance roads are open for use during construction.
- Working with all stakeholders on design details (fencing, retaining walls, signage, access, pavement surface, plants, and maintenance).
- Providing information on the cut and fill volumes associated with impacts to San Elijo triggered by Section 4(f).
- · Continuing discussions regarding right-of-way exchange.

Furthermore, Caltrans acknowledges the CDFW, DPR, and SELC may identify other concerns besides those listed above. For that reason, Caltrans looks forward to continued coordination throughout the project lifecycle.

Caltrans is now requesting your written concurrence in this *de minimis* determination, as required under Section 4(f) (49 USC 303[d]; 23 USC 138[d]). A signature block is provided at the bottom of this letter for your convenience. If you have any questions, please contact Shay Lynn Harrison, Chief, Environmental Analysis, Branch C, at (619) 688-0190.

Sincerely,

BRUCE L. APRIL

Deputy District Director, Environmental

Enclosure

c: Shay Lynn M. Harrison, Chief, Environmental Analysis, Branch C

Figure 5-5.4 (cont.): San Elijo Lagoon Conservancy Concurrence on Section 4(f) *De Minimis* Finding for San Elijo Lagoon



San Elijo Lagoon Conservancy Concurrence with De Minimix Impact Finding for San Elijo Lagoon Reserve

The signature below represents written concurrence on the de minimis impact finding that the proposed Interstate 5 North Coast Corridor Project 8+4 Buffer Alternative would not adversely affect the activities, features, and attributes that qualify the property. San Elijo Lagoon, for protection under Section 4(f) within the City of Encinitas.

Mr. Doug Gibson

Executive Director and Principal Scientist

San Elijo Lagoon Conservancy

DATE

Calman agencia achilio ayear Calmina

Figure 5-5.4 (cont.): San Elijo Lagoon Conservancy Concurrence on Section 4(f) *De Minimis* Finding for San Elijo Lagoon



STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 11 4050 TAYLOR STREET, M.S. 242 SAN DIEGO, CA 92110 PHONE (619) 688-0100 FAX (619) 688-4237 TTY 711 www.dot.ca.gov



Flex your power Be energy efficient

April 30, 2013

11-SD-5 PM: R28.4 to R55.4 EA: 235800 (1100000159) SCH#: 2004101076

Mr. Skip Hammann Public Works Director City of Carlsbad 1635 Faraday Avenue Carlsbad, CA 92008

Dear Mr. Hammann:

RE: Agua Hedionda Lagoon Potential Impacts with I-5 NCC Project

The California Department of Transportation (Caltrans) District 11 on behalf of the Federal Highway Administration (FHWA) is seeking written concurrence for potential use of a portion of Agua Hedionda Lagoon within the City of Carlsbad along Interstate 5 (I-5), that potential use of park land would not alter the functions of this recreational facility.

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966 states that a policy of the United States Government is that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. FHWA and Caltrans have concluded that the Agua Hedionda Lagoon warrants protection under Section 4(f) as it is a publicly accessed and publicly leased recreation area.

FHWA and Caltrans have prepared a Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) and a Supplemental Draft Environmental Impact Report/Environmental Impact Statement (Supplemental Draft EIR/EIS) for the proposed I-5 North Coast Corridor Project (I-5 NCC Project). FHWA and Caltrans propose improvements to maintain or improve the existing and future traffic operations on the existing I-5 freeway from La Jolla Village Drive in San Diego to Harbor Drive in Oceanside/Camp Pendleton, extending approximately 27 miles (PM R28.4 to R55.4) along I-5. Impacts to Agua Hedionda Lagoon were discussed in Appendix A: Resources Evaluated Relative to the Requirements of Section 4(f).

In July 2011, Caltrans identified the 8+4 Buffer Alternative (I-5 Express Lanes) as the Locally Preferred Alternative (LPA). The LPA consists of two high-occupancy vehicle (HOV)/Managed Lanes in each direction, separated by a buffer from the existing four general purpose lanes in each direction.

Figure 5-5.5: City of Carlsbad Concurrence on Section 4(f) *De Minimis* Finding for Agua Hedionda Lagoon



Mr. Skip Hammann April 30, 2013 Page 2

APPLICABILITY OF SECTION 4(f)

Section 4(f) legislation allows the USDOT to determine that certain uses of a Section 4(f) land would have no adverse effect on the protected resource. Such *de minimis* impacts on publicly owned parks; recreational areas of national, state or local significance; wildlife or waterfowl refuges; or lands from a historic site of national, state or local significance are defined as those that do not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) (49 USC 303[d]; 23 USC 138[d]). When FHWA proposes to make a *de minimis* impact finding, it must provide an opportunity for public comment on the proposed finding (this was included in the public comment period for the I-5 NCC Project Draft EIR/EIS). In addition, the official(s) with jurisdiction over the Section 4(f) resource in question must concur, in writing, with the finding of Caltrans and FHWA in the case of parks, recreation areas, and wildlife and waterfowl refuges, that the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection (23 CFR § 774.5[b]).

DESCRIPTION OF AGUA HEDIONDA LAGOON WITHIN THE PROJECT BOUNDARY

Agua Hedionda Lagoon, located in Carlsbad, is an approximately 162-ha (400-ac), man-made water body that was constructed in 1954. Agua Hedionda Lagoon, as shown in Figure 15, is surrounded by the Pacific Ocean to the west, undeveloped land to the east, the Encina Power Plant to the south, and residential development to the north. Agua Hedionda Lagoon is connected to the Pacific Ocean through an inlet channel, and to Agua Hedionda Creek and its tributaries in the inner lagoon.

Agua Hedionda Lagoon is owned by Cabrillo Power II, a privately owned corporation, who leases the lagoon to the City of Carlsbad to manage recreational and commercial uses. This long-term lease began in 1957, and is to be renewed every ten years. This agreement turns over operation of the lagoon to the City of Carlsbad, which makes the resource subject to Section 4(f) protection. The City of Carlsbad allows boating and water skiing on the lagoon, and the YMCA operates a canoeing center. A white seabass research facility, jointly managed by Hubbs/Seaworld and California Department of Fish and Wildlife (CDFW), is located at the lagoon, as is a commercial mussel-growing facility. These recreational, research, and commercial activities would not be impacted during construction of the proposed project.

CDFW manages a 75-ha (186-ac) Ecological Reserve consisting of wetlands located at the eastern end of the lagoon (see Figure 15). This Ecological Reserve is owned by the State of California; however, this Ecological Reserve is located approximately 914 m (3,000 ft.) east of the proposed project. Implementation of the proposed project would not require use of any land within the Agua Hedionda Lagoon CDFW Reserve.

Figure 5-5.5 (cont.): City of Carlsbad Concurrence on Section 4(f) *De Minimis* Finding for Agua Hedionda Lagoon



Mr. Skip Hammann April 30, 2013 Page 3

Impacts with 8+4 with Buffer Alternative (Locally Preferred Alternative)

Per the 2050 Regional Transportation Plan, implementation of the 8+4 with Buffer Alternative north of Palomar Airport Road would occur between years 2030 to 2035. This phase includes the Agua Hedionda bridge replacement and I-5 North Coast (NC) Bike Trail. Permanent impacts from these improvements would use approximately 0.64 ha (1.59 ac) with 0.001 ha (.02 ac) for a temporary construction easement. The temporary construction easement enables improvements that avoid further use of the lagoon. The area for use would be of open water and undeveloped land leased to the City of Carlsbad, which is approximately 1.1% of the total area of Agua Hedionda Lagoon. These minor land uses would not alter or affect any recreation activities at the lagoon. Coordination with the City will continue to clarify the proposed use of the lagoon and adjacent areas by the proposed project.

Proposed De Minimis Finding

Implementation of the proposed project would not impede the ability of the lagoon recreation for boating, water skiing, and canoeing. Public and private access to the lagoon would not be affected. The proposed project would not interfere with existing or planned trails and instead provides an opportunity to enhance and connect with them. The visual character of the lagoon would not be adversely changed; the use of small amounts of City leasehold land would simply extend the Caltrans right-of-way boundary outward slightly, and would ultimately result in a view of the area adjacent to I-5 as similar to the existing condition. Increases in noise levels would not be noticeable to lagoon users. With the project, future noise levels at the lagoon are projected to increase approximately 2 dBA over a majority of the lagoon. This 2 dBA increase would not be perceptible to the human ear. The increase also would not substantially increase the potential for noise to impact sensitive species.

Areas of natural vegetation disturbed through construction would be restored with native plant species and mitigated at ratios agreed upon by the resource agencies as part of the overall mitigation plan for the proposed project.

Overall, it is expected that use of 0.64 ha (1.59 ac) with 0.001 ha (.02 ac) for a temporary construction easement of the lagoon would not adversely affect any of the activities, features, or attributes of the publicly owned regional open space park that qualify the resource for protection under Section 4(f), and is proposed as *de minimis*.

Figure 5-5.5 (cont.): City of Carlsbad Concurrence on Section 4(f) *De Minimis* Finding for Agua Hedionda Lagoon



Mr. Skip Hammann April 30, 2013 Page 4

Coordination between Caltrans/FHWA and the City of Carlsbad

In the City of Carlsbad comment letters dated November 22, 2010 and October 12, 2012 on the Draft EIR/EIS and Supplemental Draft EIR/EIS (respectively), the City commented on the trails for Agua Hedionda Lagoon and stated that east/west crossing at both bridge abutments are critical for connectivity for trails, including the Coastal Rail Trail. Caltrans will incorporate "Potential Future Pedestrian/Bike Trail and Wildlife Benches" next to the north and south abutments of the Agua Hedionda bridge. Caltrans on behalf of FHWA is continuing the coordination with the City of Carlsbad. Caltrans and the City met on February 15, 2013, and had a teleconference on March 28, 2013.

Since the project design is still in the preliminary phases, further coordination with the City of Carlsbad will occur regarding the following:

- Visual changes resulting from implementation of the LPA, including the Agua Hedionda bridge replacement, I-5 NC Bike Trail, and the proposed retaining wall for this bike trail.
- How the I-5 NC Bike Trail would connect with the planned east-west trails under and east of I-5 to enable travel between inland areas and the beach.
- How to best design the LPA, including the Agua Hedionda bridge replacement and the I-5 NC Bike Trail, to avoid and/or reduce impacts to the Foxes lift station.
- How to best enhance the nearby recreation uses and public use of the lagoon and trails.
- Consideration of pets on proposed lagoon trails.

Furthermore, Caltrans acknowledges the City may identify other concerns besides those listed above, particularly since construction of the LPA in the vicinity of the lagoon is not scheduled until 2030 at the earliest. For that reason, Caltrans agrees to continue its coordination efforts with the City into the future.

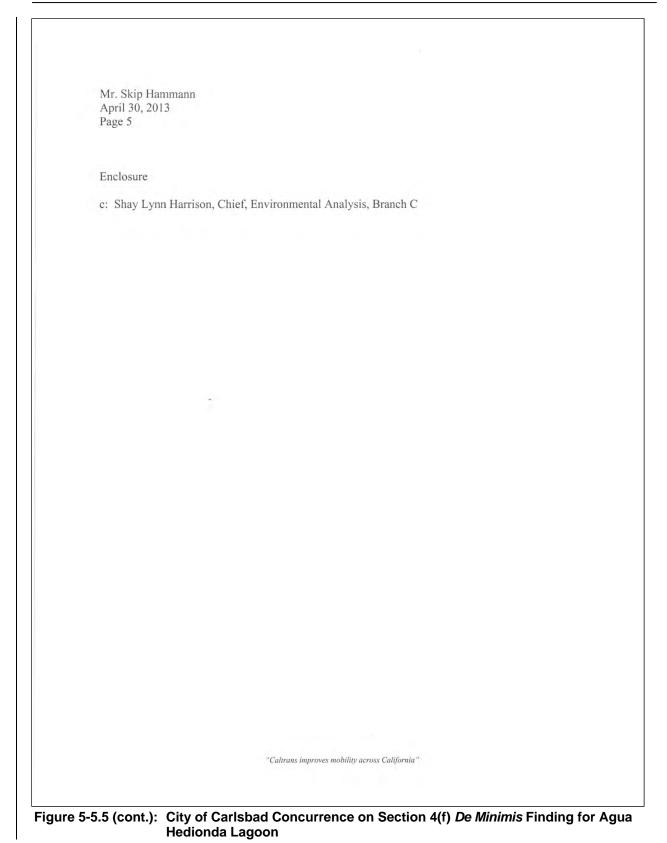
Caltrans is now requesting your written concurrence in this de minimis determination, as required under Section 4(f) (49 USC 303[d]; 23 USC 138[d]). A signature block is provided at the bottom of this letter for your convenience. If you have any questions, please contact Shay Lynn Harrison, Chief, Environmental Analysis, Branch C, at (619) 688-0190.

Sincerely,

Deputy District Director, Environmental

Figure 5-5.5 (cont.): City of Carlsbad Concurrence on Section 4(f) De Minimis Finding for Agua **Hedionda Lagoon**







City of Carlsbad Concurrence with *De Minimis* Impact Finding for Agua Hedionda Lagoon

The signature below represents written concurrence on the *de minimis* impact finding that the proposed Interstate 5 North Coast Corridor Project 8+4 Buffer Alternative would not adversely affect the activities, features, and attributes that qualify the property, Agua Hedionda Lagoon, for protection under Section 4(f) within the City of Carlsbad.

Mr. Skip Hammann Public Works Director City of Carlsbad DATE

Figure 5-5.5 (cont.): City of Carlsbad Concurrence on Section 4(f) *De Minimis* Finding for Agua Hedionda Lagoon



STATE OF CAUFORNIA - THE RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, Coversor

Reply To: FHWA070320A

OFFICE OF HISTORIC PRESERVATION DEPARTMENT OF PARKS AND RECREATION

P.O. BOX 94/2898 SACRAMENTO, CA 94/298-0/001 (018) 653-6624 Fixe: (016) 653-0824odolipo@dnp.parks.ca.gov www.ohp.parks.ca.gov

March 17, 2008

Gene K. Fong, Division Administrator Federal Highway Administration California Division 650 Capitol Mall, Suite 4-100 Sacramento, CA 95814

Re: Finding of Effect for the Proposed I-5 North Coast Corridor Project, San Diego County, CA

Dear Mr. Fong:

Thank you for consulting with me about the subject undertaking in accordance with the Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA).

The Federal Highway Administration (FHWA) requested a finding of effect for the above cited undertaking. An inventory and determinations of eligibilities had been previously forwarded for our comments.

The undertaking will affect both archeological and built environment resources. While effects to most historic properties can be avoided either by conditions or design, two archeological properties will be adversely affected. While Caltrans' request makes various effects determination, the undertaking will have an adverse effect. I concur with this finding.

The adverse effects to the two archeological sites are the results of construction of sound walls. Caltrans proposes to mitigate these effects through data recovery and design of the sound walls. The sound walls are proposed in portions of the sites which show evidence of surface and to some extent, subsurface disturbance. The walls have been designed to limit deep disturbance through placement of footings every eight feet rather than continuous. Data recovery will be limited to the ADI and will focus on those areas where footings are proposed and the most intact archeological resources are present.

Caltrans has included an ESA Action Plan, two research designs and a draft MOA with their finding of effect. The research designs and the ESA Action Plan seem reasonable. My only question is why these three separate documents are not incorporated into a single historic property treatment plan? Caltrans proposes to add the ESA Action Plan

Figure 5-5.6: SHPO Coordination



Mr. Fong March 17, 2008 Page 2 of 2

as a construction stipulation, but for the purposes of the MOA, it would be cleaner and simpler to incorporate all of these documents into a single plan.

The MOA would benefit from three major changes. First, does FHWA plan to participate in this MOA or should it be formatted for Caltrans to participate as the Agency Official? If the latter is the case, the MOA should include reference to the MOU delegating Caltrans such authority. Second, as noted above, by incorporating the two research designs and ESA Action Plan into a single Historic Property Treatment Plan would make the MOA much simpler. The HPTP could be become an appendix to the MOA and the citation could provide for changes to the plan without amending the MOA. Reference to treatment of individual properties would be added to the plan and not called out in the MOA. Finally, the MOA should use standard administrative stipulations which are found in most of OHPs MOAs and PAs rather than the ones proposed. Other editorial changes are necessary such as Caltrans agreeing to implement the stipulations of the agreement document.

In summary, given the limited nature of the adverse effects, the proposed treatment of historic properties is reasonable.

Thank you for considering historic properties as part of your project planning. If you have any questions, please contact Dwight Dutschke of my staff at your earliest convenience at (916) 653-9134 or e-mail at ddutschke@parks.ca.gov or Natalie Lindquist at (916) 654-0631 or e-mail at nlindquist@parks.ca.gov.

Sincerely, Sussi K Strattor for

Milford Wayne Donaldson, FAIA State Historic Preservation Officer

Figure 5-5.6 (cont.): SHPO Coordination





Figure 5-5.7: SHPO Coordination on Biological Mitigation Parcels



STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 11 4050 TAYLOR STREET, M.S. 242 SAN DIEGO, CA 92110 PHONE (619) 688-0240 FAX (619) 688-4237 TTY 711 www.dol.ca.gov



Flex your power! Be energy efficient!

July 1, 2013

Manuel Sanchez Federal Highway Administration California Division 650 Capitol Mall, Suite 4-100 Sacramento, CA 95814

Dear Mr. Sanchez:

File: 11-SD-5 PM: R28.397 / R55.4 EA: 235800

Subject: Fifth and Sixth Supplemental Historic Property Survey Reports (HPSR) Submitted Pursuant to the Section 106 PA; Revised Finding of Effect for the I-5 North Coast Corridor Project, Submitted Pursuant to Stipulation X.B.1.a of the Section 106 PA

The California Department of Transportation (Caltrans) is notifying the Federal Highway Administration (FHWA) of APE revisions for the I-5 NCC, requesting for FHWA review and concurrence with the Finding of No Adverse Effect (FNAE), and requesting FHWA consult with SHPO regarding the project's affects on historic properties. The I-5 NCC has been exempted from delegation, and therefore, is not subject to the *Memorandum of Understanding* between FHWA and Caltrans concerning the State of California's Participation in the MAP 21 Program. As such, the enclosed FNAE is being transmitted to FHWA in accordance with Stipulation X.B.1.a of the Section 106 Programmatic Agreement (PA), which became effective on January 1, 2004. Under the PA, Caltrans is responsible for ensuring the appropriateness of the APE (Stipulation VIII.A), the adequacy of historic property identification efforts (Stipulation VIII.B), and evaluation of historic properties (Stipulation VIII.C). All of the above efforts culminated in the avoidance of adverse effects as resources were identified.

The I-5 NCC is located in the central coastal area of San Diego County, between PM 28.397 and 54.4 along Interstate 5, and PM 27.312 and 28.8 along Interstate 805. The proposed project will widen Interstate 5 to add High Occupancy Vehicle (HOV), General Purpose, and Auxiliary Lanes (see the 2007 HPSR for more details). Previous cultural resource reports for this project include the 2007 HPSR, five Supplemental HPSRS (2008-2010), and several technical studies.

In the Fifth Supplemental HPSR, Caltrans changed the effect finding at site CA-SDI-7296. The finding warranted re-evaluation, per Stipulation VIII.C.4, since the previous justification was based on an error of fact. Caltrans has changed the effect finding from No Adverse Effect with Standard Conditions-ESA to No Historic Properties Affected since CA-SDI-7296 was determined ineligible to the NRHP, so by definition is not a historic property according to Stipulation II. CA-SDI-7296

Figure 5-5.8: Caltrans Letter to FHWA Regarding APE Revisions



Mr. Sanchez July 1, 2013 Page 2

had been established as an ESA in the 2008 Second Supplemental HPSR on the incorrect notion that the eastern portion of the site had not been tested. This Fifth Supplemental HPSR has been transmitted for your records.

In accordance with Attachment 3 of the PA, Caltrans PQS modified the APE to capture the design revisions of this undertaking. The Sixth Supplemental HPSR unifies the entire I-5 NCC under a single APE: updating the original APE (2007) by adding the Biological Mitigation Projects (2008-2010) and new areas shaped by project redesign (2013), but removing archaeological site CA-SDI-17928 and built environment resource 510-514 La Costa Avenue which have been avoided through project redesign. The APE was also modified to incorporate the entire ESA site boundaries of CA-SDI-17672 and CA-SDI-17907 which were mistakenly not included in the 2007 APE. The sites listed above and the archaeological sites related to the supplemental APE are the only cultural resources represented in the APE map (Exhibit 3 in the HPSR). No resources were identified within the Supplemental APE and a Finding of No Historic Properties Affected, per Stipulation IX.A, is appropriate. This Sixth Supplemental HPSR has been transmitted for your records.

The 2013 FNAE documents the effect finding change for the project as a whole that has transpired with project redesign. Caltrans will no longer build the proposed soundwalls (SW723 and SW729) to the north and south of the Batiquitos Lagoon in Carlsbad, San Diego County. All effects to sites CA-SDI-12670 and CA-SDI-17928 will be avoided as a result of this change. As previously determined, this undertaking will not cause an adverse effect to the built environment historic property located at 767 Orpheus Avenue, since the sliver takes required for this project would not affect any of the qualities that make this property significant. This 2013 FNAE reiterates the argument presented in 2007 Finding of Effect regarding the 767 Orpheus Avenue property. All other resources within the APE are protected by Environmentally Sensitive Area designations. As previously determined and pursuant to Stipulation X.B.2.a(ii), Caltrans is assuming that the following archaeological sites are eligible for the purposes of this undertaking only: CA-SDI-209; CA-SDI-603; CA-SDI-607; CA-SDI-628; CA-SDI-762; CA-SDI-6849; CA-SDI-10965; CA-SDI-12670; CA-SDI-16637; CA-SDI-16638H; CA-SDI-16639; CA-SDI-17672; CA-SDI-17907H; CA-SDI-17960; CA-SDI-18917. Environmentally Sensitive Area (ESA) designations will be delineated at and around these sites and the 2013 ESA Action Plan (which updated the 2007 ESA Action Plan submitted to FHWA and SHPO on December 4, 2007 and approved by SHPO on March 17, 2008) will be enacted to ensure that the project will avoid these resources. Caltrans will now avoid all adverse effects to historic properties (properties that were previously impacted and adversely affected are now avoided). As such, the 2007 draft Memorandum of Agreement and 2007 Cultural Resources Treatment Plan are no longer required for this undertaking.

Figure 5-5.8 (cont.): Caltrans Letter to FHWA Regarding APE Revisions



Mr. Sanchez July 1, 2013 Page 3

FINDING	RESOURCE
NO ADVERSE EFFECT (Without Standard Conditions) -De minimis finding under Section 4(f)	767 Orpheus Avenue
NO ADVERSE EFFECT (with Standard Conditions-ESA)	CA-SDI-209
	CA-SDI-603
	CA-SDI-607
	CA-SDI-628
	CA-SDI-762
	CA-SDI-6849
	CA-SDI-10965
	CA-SDI-12670
	CA-SDI-16637
	CA-SDI-16638H
	CA-SDI-16639
	CA-SDI-17672
	CA-SDI-17907H
	CA-SDI-17960
	CA-SDI-18917

Lastly, Caltrans is also informing the SHPO that this notification will be treated as the SHPO's concurrence for this project's Section 4(f) *de minimis* determination.

The enclosed FNAE documents Caltrans' Section 106 responsibilities. Caltrans hereby notifies FHWA that these findings are in accordance with Stipulation X.B.1.a of the PA and requests FHWA to consult with SHPO regarding the project's effects on historic properties in the APE. If you have any questions or comments, please contact me at (619) 688-0240 or kevin_hovey@dot.ca.gov.

Sincerely

KEVIN HOVEY, Chief

Environmental Analysis, Branch D

Cultural Resource Studies—Local Assistance Liaison

Enclosures (3)

c: Shay Lynn Harrison, Chief of Environmental Analysis, Branch C, Caltrans District 11

K. Tsunoda, Heritage Resources Coordinator/Cultural Library, Caltrans District 11

T. Jaffke, 106 Coordinator, Caltrans Headquarters

South Coast Information Center (SCIC)-SDSU

Figure 5-5.8 (cont.): Caltrans Letter to FHWA Regarding APE Revisions





California Division

July 12, 2013

650 Capitol Mall, Suite 4-100 Sacramento, CA 95814 (916) 498-5001 (916) 498-5008 (fax)

> In Reply Refer To: HDA-CA

Dr. Carol Roland-Nawi State Historic Preservation Officer (SHPO) Office of Historic Preservation 1725 23rd Street, Suite 100 Sacramento, CA 95816

Attn: Ms. Susan Stratton

Dear Dr. Roland-Nawi:

The Federal Highway Administration (FHWA) is notifying the State Historic Preservation Officer (SHPO) of Area of Potential Effect (APE) revisions for the Interstate 5 North Coast Corridor (I-5 NCC) project and requesting SHPO's concurrence with the Finding of No Adverse Effect (FNAE). The I-5 NCC project has been retained by FHWA. As such, the enclosed FNAE is being transmitted to SHPO in accordance with Stipulation X.B.1.a of the Section 106 Programmatic Agreement (PA), which became effective on January 1, 2004.

The I-5 NCC project is located in the central coastal area of San Diego County, between PM 28.397 and 54.4 along Interstate 5, and PM 27.312 and 28.8 along Interstate 805. The proposed project will widen Interstate 5 to add High Occupancy Vehicle, General Purpose, and Auxiliary Lanes (see the 2007 Historic Property Survey Report (HPSR) for more details). Previous cultural resource reports for this project include the 2007 HPSR, five Supplemental HPSRs (2008-2010), and several technical studies.

In the Fifth Supplemental HPSR, Caltrans changed the effect finding at site CA-SDI-7296. The finding warranted re-evaluation, per Stipulation VIII.C.4, since the previous justification was based on an error of fact. Caltrans has changed the effect finding from No Adverse Effect with Standard Conditions-Environmentally Sensitive Area (ESA) to No Historic Properties Affected since CA-SDI-7296 was determined to be ineligible for listing on the National Register of Historic Places; so, by definition it is not a historic property in accordance with Stipulation II. CA-SDI-7296 had been established as an ESA in the 2008 Second Supplemental HPSR on the incorrect notion that the eastern portion of the site had not been tested. This Fifth Supplemental HPSR has been transmitted for your records.

In accordance with Attachment 3 of the PA, Caltrans Professionally Qualified Staff modified the APE to capture the design revisions of this undertaking. The Sixth Supplemental HPSR unifies the entire 1-5 NCC under a single APE; updates the original APE (2007) by adding the Biological Mitigation Projects (2008-2010); and incorporates new areas shaped by project redesign (2013). In addition, it removes archaeological site CA-SDI-17928 and built- environment resource 510-514 La Costa Avenue which have been avoided through project redesign. The APE was also modified to incorporate the entire ESA site boundaries of CA-SDI-17672 and CA-SDI-17907 which were mistakenly not included in the 2007 APE. The sites listed above and the archaeological sites related to the supplemental APE are the only cultural resources represented in the APE map (Exhibit 3 in the HPSR). No resources were identified within the Supplemental APE and a Finding of No Historic Properties Affected, per Stipulation IX.A, is appropriate. This Sixth Supplemental HPSR has been transmitted for your records.

Figure 5.5-9: FHWA Letter to SHPO Regarding APE Revisions



2

The 2013 FNAE documents the effect finding change for the project as a whole that has transpired with project redesign. Caltrans will no longer build the proposed soundwalls (SW723 and SW729) to the north and south of the Batiquitos Lagoon in Carlsbad, San Diego County. All effects to sites CA-SDI-12670 and CA-SDI-17928 will be avoided as a result of this change. As previously determined, this undertaking will not cause an adverse effect to the built-environment historic property located at 767 Orpheus Avenue, since the sliver-takes required for this project would not affect any of the qualities that make this property significant. This 2013 FNAE reiterates the argument presented in 2007 Finding of Effect regarding the 767 Orpheus Avenue property. All other resources within the APE are protected by ESA designations. As previously determined and pursuant to Stipulation X.B.2.a(ii), FHWA and Caltrans have determined that the following archaeological sites are eligible for the purposes of this undertaking only: CA-SDI-209; CA-SDI-603; CA-SDI-607; CA-SDI-628; CA-SDI-762; CA-SDI-6849; CA-SDI-10965; CA-SDI-12670; CA-SDI-16637; CA-SDI-16638H; CA-SDI-16639; CA-SDI-17672; CA-SDI-17907H; CA-SDI-17960; CA-SDI-18917. ESA designations will be delineated at and around these sites and the 2013 ESA Action Plan (which updated the 2007 ESA Action Plan submitted to FHWA and SHPO on December 4, 2007 and approved by SHPO on March 17, 2008) will be enacted to ensure that the project will avoid these resources. Caltrans will now avoid all adverse effects to historic properties (properties that were previously impacted and adversely affected are now avoided). As such, the 2007 draft Memorandum of Agreement and 2007 Cultural Resources Treatment Plan are no longer required for this undertaking.

FINDING	RESOURCE
NO ADVERSE EFFECT (Without Standard Conditions) -De minimis finding under Section 4(f)	767 Orpheus Avenue
NO ADVERSE EFFECT (with Standard Conditions-ESA)	CA-SDI-209
The section is a second of the	CA-SDI-603
	CA-SDI-607
	CA-SDI-628
	CA-SDI-762
	CA-SDI-6849
	CA-SDI-10965
	CA-SDI-12670
	CA-SDI-16637
	CA-SDI-16638H
	CA-SDI-16639
	CA-SDI-17672
	CA-SDI-17907H
	CA-SDI-17960
	CA-SDI-18917

Lastly, FHWA is also informing the SHPO that a Section 4(f) de minimis determination is being made for the historic property located at 767 Orpheus Avenue.

The enclosed FNAE documents FHWA's Section 106 efforts and responsibilities. FHWA has determined these findings are in accordance with Stipulation X.B.1.a of the PA and requests SHPO to concur with the project's effects on historic properties in the APE. If you have any questions or comments, please contact Larry Vinzant at (916) 498-5040, email larry.vinzant@dot.gov or Shawn Oliver at (916) 498-5048, email shawn.oliver@dot.gov.

Figure 5.5-9 (cont.): FHWA Letter to SHPO Regarding APE Revisions





Figure 5.5-9 (cont.): FHWA Letter to SHPO Regarding APE Revisions



STATE OF CALIFORNIA - THE RESOURCES AGENCY

EDMUND G. BROWN, JR., Governo

OFFICE OF HISTORIC PRESERVATION DEPARTMENT OF PARKS AND RECREATION

1725 23rd Street, Suite 100 SACRAMENTO, CA 95816-7100 (916) 445-7000 Pax. (916) 445-7053 caishpog parks.ca.gov www.chp.parks.ca.gov

September 11, 2013

Reply in Reference To: FHWA07032A

Vincent Mammano Division Administrator U.S. Department of Transportation Federal Highways Administration 650 Capitol Mall, Suite 4-100 Sacramento, CA 95814

RE: I-5 North Corridor Project – Supplemental Historic Property Survey Reports 5 & 6 and Finding of Effect.

Dear Mr. Mammano:

Thank you for your July 12, 2013 letter continuing consultation on the I-5 North Corridor Project in San Diego County (I-5 NCC). The Federal Highway Administration (FWHA) is consulting pursuant to the Programmatic Agreement (PA) Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California; effective January 1, 2004 (PA).

The I-5 NCC project is located in the central coastal area of San Diego County, between PM 28.397 and 54.4 along Interstate 5, and PM 27.312 and 28.8 along Interstate 805. Previous cultural resource reports for this project include the 2007 HPSR, five Supplemental HPSRs (2008-2010), and several technical studies.

In addition to your July 12, 2013 letter received July 16, 2013, you have submitted the following documents as evidence of your efforts to identify and evaluate historic properties in the project APE:

- Fifth Supplemental Historic Property Survey Report; San Dieguito Biological Mitigation Project for the Caltrans Interstate 5 North Coast Corridor Project, San Diego County, California. Prepared by California Department of Transportation, District 11; March 12, 2013
- Sixth Supplemental Historic Property Survey Report; Revised Area of Potential Effects for the Caltrans Interstate 5 North Coast Corridor Project, San Diego County, California. Prepared by California Department of Transportation, District 11; March 12, 2013. (SHPSR-6)
- Finding of No Adverse Effect for the Caltrans Interstate 5 North Coast Corridor Project, San Diego County, California. Prepared by California Department of Transportation, District 11; May 2013. (FNAE)

Each report is discussed individually as follows:

Figure 5-5.10: SHPO Concurrence on Finding of No Adverse Effect



11 September 2013 Page 2 of 4 FHWA07032A

Fifth Supplemental Historic Property Survey Report; San Dieguito Biological Mitigation Project (SHPSR-5):

The mitigation project area consists of one twenty-two acre parcel (APN-304-090-02) proposed to serve as a biological mitigation parcel for the project. It is planned to plant a variety of native Coastal Sage Scrub species in the Fall of 2013. The Area of Potential Effects (APE) for this SHPSR-5 consists of the parcel boundaries, within which nonnative vegetation will be removed and sage seedlings will be planted in hand excavated 20 cm deep X 30 cm diameter holes; denoting the vertical APE.

The records search conducted for the original HPSR at the South Coastal Information Center was updated in November of 2012. CA-SDI-7296 and P-37-029577 have been recorded within the project APE. Site P-37-029577 has been determined Property Type 1 of Attachment 4 of the PA and is exempt from evaluation. The boundaries of site CA-SDI-7296, originally recorded in 1979, have changed several times over the years as new information came to light. In 2001, Caltrans conducted subsurface testing of the site and determined the site ineligible to the National Register of Historic Places (NRHP) to which the SHPO concurred on January 31, 2003. Subsequent testing of the site for the current project in 2007 confirmed these findings. In 2008 a Second SHPSR proposed changing the effect finding from No Adverse Effect with Standard Conditions- Environmentally Sensitive Area (ESA) based on erroneous information that the eastern portion of the site had not been tested and was unevaluated. Caltrans consulted with the SHPO but did not ask for consensus at that time. SHPSR-5 documents the discovery of that error and requests that the determination of CA-SDI-7296 as ineligible to the NRHP established on January 31, 2003 remain the official determination.

Sixth Supplemental Historic Property Survey Report; Revised APE (SHPSR-6);
The APE for the I-5 NCC project was approved on December 20, 2006. Design changes including the avoidance of one archaeological and one built environment resource and the addition of a biological mitigation site, resulted in refined design plans for the Final Environmental Document in December 2012. In accordance with Attachment 3 of the PA, Caltrans Professionally Qualified Staff modified the APE to capture the design revisions of this undertaking. The Sixth Supplemental HPSR unifies the entire 1-5 NCC under a single APE; updates the original APE (2007) by adding the Biological Mitigation Projects (2008-2010); and incorporates new areas shaped by project redesign (2013). In addition, it removes archaeological site CA-SDI-17928 and built-environment resources 510-514 La Costa Avenue and 636 Leucadia Blvd; which have been avoided through project redesign. The APE was also modified to incorporate the entire ESA site boundaries of CA-SDI-17672 and CA-SDI-17907 which were mistakenly not included in the 2007APE.

The changes in the APE encompassed new areas not covered in previous archaeological studies. The November 2012 record search at the South Coastal Information Center and Caltrans Cultural Resource Database were conducted on January 10, 2013. Nine previously recorded cultural resources were within the study area. Intensive pedestrian surface survey, utilizing 10 meter wide transects was conducted in January, 2013 of the study area and attempts made to relocate the nine previously recorded sites. None remained within the APE for the project. No new

Figure 5-5.10 (cont.): SHPO Concurrence on Finding of No Adverse Effect



11 September 2013 Page 3 of 4 FHWA07032A

cultural resources were identified. Native American consultation is ongoing.

FHWA is seeking concurrence that the revised APE is sufficient for the project and that additional archaeological study required by changes in the APE and documented in the Fourth Supplements Archaeological Survey Report (SHPSR-6; Attachment 1) is sufficient.

Finding of No Adverse Effect Document

The I-5 NCC project has undergone significant changes since the initial 2007 Historic Property Survey Report (HPSR). The May 2013 Finding of Effects (FOE) report updates the 2007 with which the SHPO concurred with March 17, 2008. Contrary to the 2007 FOE, the current project will no longer have adverse effects to NRHP eligible cultural resources. FHWA is requesting SHPO concurrence on a Finding of No Adverse Effect for the project as a whole. The following resources lie within the APE and have been assumed eligible to the NRHP for purposes of the project. FHWA has determined there will be No Adverse Effect to these resources with Standard Conditions – ESA Action Plan (approved by SHPO on March 17, 2008): CA-SDI-209; CA-SDI-603; CA-SDI-607; CA-SDI-628; CA-SDI-762; CA-SDI-6849; CA-SDI-10965; CA-SDI-12670; CA-SDI-16637; CA-SDI-16638H; CA-SDI-16639; CA-SDI-17672; CA-SDI-17907H; CA-SDI-17900; CA-SDI-18917. These sites will receive archaeological and Native American monitoring during construction.

National Register of Historic Places eligible property located at 676 Orpheus Avenue also lies within the APE of the project. An area of 314 square meters will be taken from the 4,000 square meter property. FHWA has determined this sliver take will have No Adverse Effect to the property. In addition, FHWA has determined a de-minimis finding under Section 4(f).

Pursuant to the PA, the FHWA has determined a finding of No Adverse Effects for the proposed project. Based on your identification efforts, I concur with the findings as listed in the table below:

DETERMINATION	
Property Type 1 of Attachment 4 of the PA and is exempt from evaluation	
Ineligible to the NRHP based on January 31, 2003 determination.	
The revised APE is sufficient.	
The supplemental archaeological studies are sufficient.	
NO ADVERSE EFFECT (Without Standard Conditions) -De minimis finding under Section 4(t)	
assumed eligible to the NRHP for purposes of this project.	
NO ADVERSE EFFECT (with Standard Conditions-ESA)	
NO ADVERSE EFFECT (with Standard Conditions-ESA)	
NO ADVERSE EFFECT (with Standard Conditions-ESA)	
NO ADVERSE EFFECT (with Standard Conditions-ESA)	
NO ADVERSE EFFECT (with Standard Conditions-ESA)	
NO ADVERSE EFFECT (with Standard Conditions-ESA)	
NO ADVERSE EFFECT (with Standard Conditions-ESA)	
NO ADVERSE EFFECT (with Standard Conditions-ESA)	
֡֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜	

Figure 5-5.10 (cont.): SHPO Concurrence on Finding of No Adverse Effect



11 September 2013 Page 4 of 4 FHWA07032A

CA-SDI-16637	NO ADVERSE EFFECT (with Standard Conditions-ESA)	
CA-SD1-16638H	NO ADVERSE EFFECT (with Standard Conditions-ESA)	
CA-SDI-16639	NO ADVERSE EFFECT (with Standard Conditions-ESA)	
CA-SDI-17672	NO ADVERSE EFFECT (with Standard Conditions-ESA)	
CA-SDI-17907H	NO ADVERSE EFFECT (with Standard Conditions-ESA)	
CA-SDI-17960	NO ADVERSE EFFECT (with Standard Conditions-ESA)	
CA-SDI-18917	NO ADVERSE EFFECT (with Standard Conditions-ESA)	

Please note: On page three of the SHPSR-5 the report states "....the SHPO never objected to this determination, and Caltrans assumed SHPO concurrence." Non-response from the SHPO allows an agency to continue with their undertaking after the 30 day comment period is over. It does not denote SHPO concurrence.

Be advised that under certain circumstances, such as unanticipated discovery or a change in project description, FHWA may have additional future responsibilities for this undertaking under 36 CFR Part 800. Thank you for seeking my comments and considering historic properties as part of your project planning. If you have any questions or concerns, please contact Associate State Archaeologist, Kim Tanksley at (916) 445-7035 or by email at kim_tanksley@parks.ca.gov.

Sincerely.

Carol Roland-Nawi, PhD

State Historic Preservation Officer

Figure 5-5.10 (cont.): SHPO Concurrence on Finding of No Adverse Effect





United States Department of the Interior

PINI A WILILIPE MERVICE

FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, California 92009

In Reply Refer To: FWS-SDG-3819.5

JAN 2 6 2015

Mr. Chris White Chief, Environmental Resource Studies Caltrans, District 11 P.O. Box 85406 MS-46 San Diego, California 92186-5406

Re: Request for Candidate, Proposed, Threatened, or Endangered Species for the Interstate 5 Widening Project, San Diego County, California

Dear Mr. White:

The U.S. Fish and Wildlife Service (Service) has reviewed the information provided in your December 14, 2004, letter to assess the potential presence of federally listed threatened, endangered, or proposed species at the proposed project site. We do not have site specific information for your project area. However, to assist you in evaluating whether or not the proposed project may affect listed species, we are providing the attached list of species that occur in the general project area. We recommend that you seek assistance from a biologist familiar with your project site, and with the listed species to assess the potential for direct, indirect, and cumulative effects likely to result from the proposed activity. You should also contact the California Department of Fish and Game for State-listed and sensitive species that may occur in the area of the proposed project. Please note that State-listed species are protected under the provisions of the California Endangered Species Act.

If it is determined that the proposed project may affect a listed or proposed species, or the designation of any critical habitat, you should request initiation of consultation (or conference for proposed species) with the Service pursuant to section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et seq.). Informal consultation may be used to exchange information and resolve conflicts with respect to listed species prior to a written request for formal consultation.



Figure 5-5.11: USFWS Listed Endangered, Threatened, and Proposed Species



Mr. Chris White (FWS-SDG-3819.5)	
Should you have any questions regard please call John DiGregoria of my sta	ding the species listed or your responsibilities under the Act, aff at (760) 431-9440, extension 208.
	Sincerely,
	Dala 3
	Therese O'Rourke Assistant Field Supervisor
Enclosure	

Figure 5-5.11 (cont.): USFWS Listed Endangered, Threatened, and Proposed Species



Mr. Chris White (FWS-SDG-3819	0.5)	3
that ma	ngered, Threatened and Proposed Species y occur in the vicinity of Interstate 5 a San Diego County, California	
Common Name	Scientific Name	Status
BIRDS		
coastal California gnatcatcher	Polioptila californica californica	T
least Bell's vireo	Vireo bellii pusillus	E
western snowy plover	Charadrius alexandrinus nivosus	T
brown pelican	Pelecanus occidentalis	E
light-footed clapper rail	Rallus longirostris levipes	E
California least tern	Sterna antillarum browni	E
southwestern willow flycatcher	Empidonax traillíí extimus	E
INVERTEBRATES San Diego fairy shrimp	Branchinecta sandiegonensis	Е
Riverside fairy shrimp	Streptocephalus woottoni	E
PLANTS Del Mar manzanita	Arctostaphylos glandulosa ssp.crassifolia	E
Dei Mar manzanita	Arciosiajnyjos gianauosa ssp.erassijona	
Encinitas Baccharis	Baccharis vanessae	E
San Diego ambrosia	Ambrosia pumila	Е
San Diego button celery	Eryngium aristulatum var. parishil	E
San Diego mesa mint	Pogogyne abramsii	Е
spreading navarretia	Navarretia fossalis	T
thread-leaved brodiaea	Brodiaea filifolia	T
	E=Endangered T=Threatened	

Figure 5-5.11 (cont.): USFWS Listed Endangered, Threatened, and Proposed Species





United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, California 92011

In Reply Refer To:
FWS-2008-B-0100/SL-0090

NOV 1 3 2007

Mr. Chris White Chief, Environmental Resource Studies Caltrans, District 11 P.O. Box 85406 MS-46 San Diego, California 92186-5406

Subject: Request for Candidate, Proposed, Threatened, or Endangered Species for the Interstate 5

Widening Project, San Diego County, California

Dear Mr. White:

The U.S. Fish and Wildlife Service (Service) has reviewed the information provided in your November 1, 2007, letter to assess the potential presence of federally listed threatened, endangered, or proposed species at the proposed project site. We do not have site specific information for your project area. However, to assist you in evaluating whether or not the proposed project may affect listed species, we are providing the attached list of species that occur in the general project area. We recommend that you seek assistance from a biologist familiar with your project site, and with the listed species to assess the potential for direct, indirect, and cumulative effects likely to result from the proposed activity. You should also contact the California Department of Fish and Game for State-listed and sensitive species that may occur in the area of the proposed project. Please note that State-listed species are protected under the provisions of the California Endangered Species Act.

If it is determined that the proposed project may affect a listed or proposed species, or the designation of any critical habitat, you should request initiation of consultation (or conference for proposed species) with the Service pursuant to section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et seq.). Informal consultation may be used to exchange information and resolve conflicts with respect to listed species prior to a written request for formal consultation.

Should you have any questions regarding the species listed or your responsibilities under the Act, please call Janet Stuckrath of my staff at (760) 431-9440, extension 270.

Sincerely,

Therese O'Rourke Assistant Field Supervisor

Enclosure



Figure 5-5.11 (cont.): USFWS Listed Endangered, Threatened, and Proposed Species



Mr. Chris White (FWS-2008-B-0100/SL-0090)

2

Listed Endangered, Threatened and Proposed Species that may occur in the vicinity of Interstate 5 in San Diego County, California

Common Name	Scientific Name	Status
BIRDS		
western snowy plover	Charadrius alexandrinus nivosus	T. CH
southwestern willow flycatcher	Empidonax traillii extimus	E, CH
brown pelican	Pelecanus occidentalis	E
coastal California gnatcatcher	Polioptila californica californica	T*, CH
light-footed clapper rail	Rallus longirostris levipes	E.
California least tern	Sternula (Sterna) antillarum browni	E
least Bell's vireo	Vireo bellii pusillus	E, CH
FISH		
tidewater goby	Eucyclogobius newberryi	E, CH
CRUSTACEANS		
San Diego fairy shrimp	Branchinecta sandiegonensis	E, pCH
Riverside fairy shrimp	Streptocephalus woottoni	E. CH
PLANTS		
San Diego thornmint	Acanthomintha ilicifolia	T. pCH
San Diego ambrosia	Ambrosia pumila	E
Del Mar manzanita	Arctostaphylos glandulosa ssp. crassifolia	E
coastal dunes milk-vetch	Astragalus tener var. titi	B T
Encinitas baccharis	Baccharis vanessae	T
hread-leaved brodiaea	Brodiaea filifolia	T, CH
Orcutt's spineflower	Chorizanthe orcuttiana	E
San Diego button-celery	Eryngium aristulatum var. parishii	E
Orcutt's hazardia	Hazardia orcuttii	C
willowy monardella	Monardella linoides ssp. viminea	E, CH
spreading navarretia	Navarretia fossalis	T, CH
California Orcutt grass	Orcuttia californica	E
San Diego mesa mint	Pogogyne abramsii	E

T=Threatened E=Endangered C=Federal candidate species T*=Proposed DPS pCH=Proposed Critical Habitat CH=Critical Habitat

Figure 5-5.11 (cont.): USFWS Listed Endangered, Threatened, and Proposed Species





Preserving America's Heritage

June 25, 2008

Mr. Chris White, Chief Environmental Resource Studies Department of Transportation Environmental Division, MS-242 4050 Taylor Street San Diego, CA 92110

Ref: Proposed I-5 North Coast Corridor Project San Diego County, California

Dear Mr. White:

On April 28, 2008 the Advisory Council on Historic Preservation (ACHP) received your notification regarding the adverse effects of the referenced undertaking. Based upon the information you provided, we have concluded that Appendix A, Criteria for Council Involvement in Reviewing Individual Section 106 Cases, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and you determine that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the California SHPO, Indian tribes, and other consulting parties, and related documentation at the conclusion of the consultation process. The filing of the MOA with the ACHP and fulfillment of its stipulations are required to complete your compliance responsibilities under Section 106 of the National Historic Preservation Act.

Thank you for providing us with your notification of adverse effect. If you have any questions or require further assistance, please contact Carol Legard at 202-606-8522 or clegard@achp.gov.

Sincerely

LaShavio Johnson

Historic Preservation Technician

Federal Permitting, Licensing and Assistance Section

Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION

1100 Pennsylvania Avenue NW, Suite 803 • Washington, DC 20004 Rhone:202-606-8503 • Fax: 202-606-8647 • achp@achp.gov • www.achp.gov

Figure 5-5.12: ACHP Response to Undertaking Notification

Chapter 6 – List of Preparers

This EIR/EIS and related technical studies were prepared by and under the supervision of Caltrans District 11 staff and other contributors identified below.

U.S. Department of Transportation – Federal Highway Administration

Manuel Enrique Sánchez, Senior Transportation Engineer/Border Engineer; Bachelor of Science in Civil Engineering, Arizona State University, Master of Public Administration, Arizona State University; 7 years of Federal Highway Administration experience.

California Department of Transportation – District 11

- Bruce April, Deputy Director Environmental; Bachelor of Science Biology, San Diego State University; 19 years of Caltrans experience.
- Michelle Blake, Environmental Planner, Archaeology; Master of Arts in Cultural Resources Management, Sonoma State University; Bachelor of Arts in Anthropology (Concentration in Archaeology), University of California at San Diego; 6 months of Caltrans experience, 5 years experience.
- Stephen R. Capuno, PE., Transportation Engineer, Project Engineer, Registered Civil Engineer; Bachelor of Science in Civil Engineering, San Diego State University; 7 years of Caltrans experience.
- Karen Crafts, Associate Environmental Planner (Archaeology); Bachelor of Arts in Anthropology, San Diego State University; 32 years of Caltrans experience.
- Seth Cutter, Associate Transportation Planner, District 11 Bicycle and Pedestrian Coordinator; Bachelor of Arts in Urban Studies and Planning, University of California San Diego; 6 years of Caltrans experience.
- Jayne Dowda, Branch Chief, Environmental Engineering; Registered Civil Engineer; Bachelor of Science in Civil Engineering, San Diego State University; 28 years of Caltrans experience.
- Mike Fordham, Transportation Engineer; Registered Civil Engineer; Master of Science in Civil Engineering (Geotechnical), Bachelor of Science in Civil Engineering, University of Nevada, Reno; 14 years of Caltrans experience.
- Shay Lynn M. Harrison, Chief, Environmental Analysis Branch C; Bachelor of Science in Environmental Science, University of California at Riverside; 13 years of Caltrans experience.
- Allen Holden, Jr., PE, TMP Manager of DTM Branch; Registered Civil Engineer/Registered Traffic Engineer; Master of Science in Civil Engineering, University of Texas at Arlington; Bachelor of Science in Civil Engineering, Cornell University; 30 years of Caltrans experience.
- Kevin Hovey, Senior Environmental Planner; Masters of Arts in Anthropology, University of California at Riverside; 7 years of Caltrans experience.
- Sayra Hurley, President, P.E., J.D., LL.M. Registered Civil Engineer; Master of Laws in Environmental Law, Master of Laws in Real Estate Law, Pace Law School; Juris Doctorate, Washburn University School of Law; Bachelor of Science in Civil Engineering, San Diego State University; 15 years of experience.
- Arturo Jacobo, P.E., Senior Transportation Engineer, Project Manager; Registered Civil Engineer; Bachelor of Science in Structural Engineering, University of California, San Diego; 22 years of Caltrans experience.
- Ken James, P.E., Transportation Engineer, Route Manager, Traffic Operations; Registered Civil Engineer; Bachelor of Science in Civil Engineering, Texas Tech University; 10 years of Caltrans experience.



- Majid Kharrati, P.E., Senior Transportation Engineer, Project Manager; Registered Civil Engineer; Bachelor of Science in Civil Engineering, University of California, Irvine; 29 years of Caltrans experience.
- Joel Kloth, PG, Engineering Geologist, Registered Professional Geologist; Bachelor of Science in Geology, California Lutheran University; 13 Years of Caltrans experience.
- Allan Kosup, Corridor Director and Supervising Transportation Engineer; Registered Civil Engineer; Bachelor of Science in Civil Engineering, Professional Engineer 1987; 29 years of Caltrans experience.
- Sandra Lavender, Associate Environmental Planner, Environmental Generalist/Permit Specialist; B.A. Urban Studies and Planning University of California San Diego; 11 years of Caltrans experience.
- Oanh Le, P.E., Transportation Engineer, Registered Civil Engineer; Bachelor of Science in Civil Engineering, University of New Orleans; 23 years of Caltrans experience.
- Emery McCaffery, Environmental Planner; Bachelor of Arts in Geography, San Diego State University; 3 months of Caltrans experience.
- Jorge A. Perez-Valdes, P.E., Project Engineer; Registered Civil Engineer; Masters of Science in Civil Engineering, San Diego State University; Bachelor of Science in Civil Engineering, Instituto Tecnológico de Tijuana; 14 years of Caltrans experience.
- Keith Ploettner, P.E., Senior Transportation Engineer, Design Manager; Registered Civil Engineer and Traffic Engineer; Bachelor of Science in Civil Engineering, San Diego State University; 27 years of Caltrans experience.
- Sue Scatolini, Associate Environmental Planner (Natural Sciences); Masters of Science in Ecology, San Diego State University; Bachelor of Science in Aquatic Biology, University of California at Santa Barbara; 12 years of Caltrans experience.
- Christopher Scott, P.E., Transportation Engineer, Registered Civil Engineer; Bachelor of Science in Civil Engineering, University of California, Davis; 7 years of Caltrans experience.
- Raychel Skeen, Associate Environmental Planner; Bachelor of Arts in Geography, California State University Humboldt, 14 years of Caltrans experience.
- Kim T. Smith, Senior Environmental Planner, Bachelor of Science in Biology, San Diego State University; 15 years of Caltrans experience.
- Paul G. Swearingen, Transportation Engineer, Environmental Engineering, Air Quality Studies, Bachelor of Science in Civil Engineering, San Diego State University; 7 years of Caltrans experience.
- Michelle (Trudell) Madigan, Associate Environmental Planner; Masters of Science in City Planning, San Diego State University; Bachelor of Science in Environmental Studies, University of California, Santa Barbara; 14 years of Caltrans experience.
- Timothy V. Vo, P.E., Transportation Engineer, Registered Civil Engineer; Bachelor of Science in Civil Engineering, California State University at Long Beach; 12 years of Caltrans experience.

HELIX Environmental Planning, Inc.

- Amy Ashley, Environmental Planner; Bachelor of Science in Environmental Management and Protection, California Polytechnic State University, San Luis Obispo; 2 years of experience.
- Kim Baranek, Senior Project Manager; Master of Arts in Geography, with an emphasis in Geographic Information Systems, San Diego State University; Bachelor of Arts in Geography and Environmental Studies, University of California, Santa Barbara; 26 years of experience.
- Andrea Bitterling, Senior Project Manager; Masters of Planning in Environmental Planning, University of Virginia; Bachelor of Arts in Environmental Studies, University of Redlands; 14 years of experience.



- Vanessa Brice, Environmental Planner; Bachelor of Arts in Biology, University of San Diego; 4 years of experience.
- Lisa Capper, Senior Project Manager; Juris Doctorate, College of Law, Western State University; Master of Arts, Candidate in Anthropology, San Diego State University; Bachelor of Arts in Anthropology, specializing in Archaeology; 35 years of experience.
- Tamara Ching, Senior Project Manager; Master of Science in Administration, University of California, Irvine; Bachelor of Arts in Social Ecology, University of California, Irvine; 30 years of experience.
- Susanne Glasgow, Senior Project Manager; Bachelor of Arts in Geography, Resource and Environmental Conservation, San Diego State University; 37 years of experience.
- Stacy Hall de Gomez, Project Manager; Masters in Marine Affairs in Fisheries Economics and Marine Policy, University of Washington; Bachelor of Science in Biology, University of Edinburgh, Scotland; 12 years of experience.
- Dennis Marcin, Senior Environmental Specialist; Bachelor of Science in Geology, Michigan State University; 32 years of experience.
- Justin Palmer, Senior GIS Specialist; Bachelor of Arts in Geography, Natural Resource and Environmental Conservation, San Diego State University; 11 years of experience.
- Melissa Whittemore, Project Manager; Graduate Certificate in National Environmental Policy Act, Utah State University; Bachelor of Science, Biology with an emphasis in Ecology, San Diego State University; 10 years of experience.

Hon Consulting, Inc.

Katherine Hon, P.E., President; Master of Engineering in Civil Engineering, University of California, Davis; Bachelor of Science in Environmental Health, San Diego State University; 33 years of experience.





CHAPTER 7 – DISTRIBUTION LIST

This distribution list indentifies the interested parties that provided and/or requested their address be included in the Final EIR/EIS. Interested parties that provided comments regarding the project through email are included on a separate email distribution list and are to be notified with an email that provides the link to their responses to comments.

Federal Government

Mark Cohen*
U.S. Army Corps of Engineers
Los Angeles District Office
P.O. Box 532711
Los Angeles, CA 90053-2525

Stephanie Hall*
U.S. Army Corps of Engineers
Regulatory Division, Los Angeles District
P.O. Box 532711
Los Angeles, CA 90053-2525

Robert R. Smith*
U.S. Army Corps of Engineers
Regulatory Division, South Coast Branch,
San Diego Section
6010 Hidden Valley Road, Suite 105
Carlsbad, CA 92011

David H. Sulouff, Chief, Bridge Section*
11th U.S. Coast Guard District
Coast Guard Island
Building #50-2
Alameda, CA 94501-5100

Office of the Secretary*
U.S. Department of Agriculture
1400 Independence Avenue, SW
Washington, DC 20250

Area Conservationist*
U.S. Department of Agriculture
Natural Resources Conservation Service
(Formerly U.S. Soil Conservation Service)
Area II
318 Cayuga Street, Suite 206
Salinas, CA 93901

U.S. Department of Commerce National Oceanic and Atmospheric Administration Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, CA 90802-4213

Director*
U.S. Department of Energy
Office of Environmental Compliance
1000 Independence Avenue, SW
Room 4G-064
Washington, DC 20585

Kathleen Sebelius, Secretary*
U.S. Department of Health and Human
Services
200 Independence Avenue
Southwest Hubert Humphrey Building,
Room 639G
Washington, DC 20201

U.S. Department of Health and Human Services* Centers for Disease Control Environmental Health and Injury Control Special Programs Group 1600 Clifton Road, Mail Stop F-29 Atlanta, GA 30333

Ophelia Basqal, Regional Administrator U.S. Department of Housing and Urban Development, Region IX 600 Harrison Street, 3rd Floor San Francisco, CA 94107-1300

Sally Brown*
U.S. Department of the Interior,
U.S. Fish and Wildlife Service
6010 Hidden Valley Road, Suite 101
Carlsbad, CA 92011

^{*} Received a hard copy of the Executive Summary.



Federal Government (cont.)

Janet Stuckrath*
U.S. Department of the Interior,
U.S. Fish and Wildlife Service
6010 Hidden Valley Road, Suite 101
Carlsbad, CA 92011

Susan Wynn*
U.S. Department of the Interior
U.S. Fish and Wildlife Service
6010 Hidden Valley Road, Suite 101
Carlsbad, CA 92011

U.S. Department of Interior, National Park Service Attn.: EIS Review Pacific Great Basin System Support Office 333 Bush Street, Suite 500 San Francisco, CA 94104-2828

Patricia Sanderson Port Regional Environmental Officer Office of Environmental Policy & Compliance U.S. Department of the Interior 333 Bush Street, Suite 515 San Francisco, CA 94104

Kelly Powell*
U.S. Department of Interior
National Park Service
168 South Jackson Street
Seattle, WA 98104-2853

Willie R. Taylor, Director*
U.S. Department of the Interior
Office of Environmental Policy and
Compliance
Main Interior Building, MS 2340
1849 C Street
Washington, DC 20240

David Valenstein*
U.S. Department of Transportation
Federal Railroad Administration
Office of Railroad Development
1200 New Jersey Avenue, SE
MS-20
Washington, DC 20590

Leslie T. Rogers, Regional Administrator U.S. Department of Transportation Federal Transit Administration Region IX 201 Mission Street, Suite 1650 San Francisco, CA 94105

U.S. Environmental Protection Agency*
Office of Federal Activities
EIS Filing Section
Ariel Rios Building
Mail Code 2252-A, Room 7241
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Connell Dunning*
U.S. Environmental Protection Agency
Region IX
Federal Activities Office, MS: CED-2
75 Hawthorne Street
San Francisco, CA 94105-3901

Elizabeth Goldman*
U.S. Environmental Protection Agency
Region IX
Federal Activities Office MS: WTR-8
75 Hawthorne Street
San Francisco. CA 94105-3901

Susan Sturges*
U.S. Environmental Protection Agency
Region IX
Federal Activities Office, MS: CED-2
75 Hawthorne Street
San Francisco, CA 94105-3901

Gregor Blackburn, CFM, Branch Chief Floodplain Management and Insurance Branch Federal Emergency Management Agency 1111 Broadway, Suite 1200 Oakland, CA 94607-4052

Nancy Ward, Regional Administrator* Federal Emergency Management Agency 1111 Broadway, Suite 1200 Oakland, CA 94607-4052

^{*} Received a hard copy of the Executive Summary.



Federal Government (cont.)

Bryant Chesney*
National Marine Fisheries Service
Southwest Regional Office
501 West Ocean Boulevard
Long Beach, CA 90802-4250

Robert S. Hoffman, Assistant Regional Administrator National Marine Fisheries Service Habitat Conservation Division Southwest Regional Office 501 West Ocean Boulevard Long Beach, CA 90802-4250

Federal Elected Officials

The Honorable Scott Peters*
U.S. House of Representatives
52nd District
4350 Executive Drive, Suite 105
San Diego, CA 92121

The Honorable Barbara Boxer* U.S. Senate 600 B Street, Suite 2240 San Diego, CA 92101

The Honorable Susan Davis* U.S. House of Representatives 53rd District 2700 Adams Avenue, Suite 102 San Diego, CA 92116

The Honorable Dianne Feinstein* U.S. Senate 750 B Street, Suite 1030 San Diego, CA 92101

The Honorable Darrell Issa* U.S. House of Representatives 49th District 1800 Thibodo Road, Suite 310 Vista, CA 92081

State Government

California Air Resources Board EIR Regional Impact Division P.O. Box 2815 Sacramento, CA 95812

Gabriel Buhr & Sherilyn Sarb California Coastal Commission San Diego Coast District Office 7575 Metropolitan Drive, Suite 103 San Diego, CA 92108-4402

Mark Delaplaine California Coastal Commission Federal Consistency Office 45 Fremont Street, Suite 2000 San Francisco, CA 94105-2219 Mark Nechodom, Conservation Director California Department of Conservation 801 K Street, MS 24-01 Sacramento, CA 95814

Director
California Department of Conservation
1416 Ninth Street
Sacramento, CA 95814

Charlton H. Bonham, Director California Department of Fish and Wildlife 1416 9th Street, 12th Floor Sacramento, CA 95814

^{*} Received a hard copy of the Executive Summary.



State Government (cont.)

Tim Dillingham
California Department of Fish and Wildlife
South Coast Region, Region 5
3883 Ruffin Road
San Diego, CA 92123

Stephen M. Juarez Environmental Program Manager California Department of Fish and Wildlife South Coast Region 3883 Ruffin Road San Diego, CA 92123

California Department of Fish and Wildlife South Coast Region 4949 Viewridge Avenue San Diego, CA 92123

Director
California Department of Food and Agriculture
1220 N Street
Sacramento, CA 95814

Carol Roland-Nawi, Ph.D, State Historic Preservation Officer Office of Historic Preservation 1725 23rd Street, Suite 100 Sacramento, CA 95816

Debbie Waldecker, Associate Environmental Scientist California Department of Parks & Recreation Southern Service Center 9885 Rio San Diego Drive San Diego, CA 92108

Richard Dennison, Superintendent, Public Safety California Department of Parks & Recreation Torrey Pines State Reserve 12600 North Torrey Pines Road San Diego, CA 92037

California Department of Forestry and Fire 2249 Jamacha Road El Cajon, CA 92019

California Department of Transportation Division of Aeronautics 1120 N Street, MS 40 P.O. Box 942874 Sacramento, CA 94274-0001

Unit Chief
Dr. Ron Chapman, Director
California Department of Public Health
P.O. Box 997377, MS 0500
Sacramento, CA 95899-7377

Debbie Raphael, Director California Department of Toxic Substances Control 10011 "I" Street Sacramento, CA 95814-2828

Greg Holmes, Unit Chief California Department of Toxic Substances Control Brownfields and Environmental Restoration Program 5796 Corporate Avenue Cypress, CA 90630

Mark Cowin, Director California Department of Water Resources P.O. Box 942836, Room 1115-1 Sacramento, CA 94235-0001

Executive Director
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

California Environmental Protection Agency 1001 I Street Sacramento. CA 95814

Michael Brown, Commissioner California Highway Patrol P.O. Box 942898 Sacramento, CA 94298-0001

^{*} Received a hard copy of the Executive Summary.



State Government (cont.)

Steve Lopez, Sergeant California Highway Patrol CHP Border Division 9330 Farnham Street San Diego, CA 92123-1216

David Ricks, Lieutenant California Highway Patrol Enforcement and Planning Division 601 N. 7th Street Sacramento. CA 95811

J.B. Rodriguez, Chief California Highway Patrol Enforcement and Planning Division 601 N. 7th Street Sacramento, CA 95811

Deb Schroder, Captain California Highway Patrol CHP Oceanside Office Border Communications Center 1888 Oceanside Boulevard Oceanside, CA 92054-3486

R.K. Stewart, Captain California Highway Patrol CHP San Diego Office 4902 Pacific Highway San Diego, CA 92110-4097

Executive Officer
California Integrated Waste Management
Board
8800 Cal Center Drive
Sacramento, CA 95826

Larry Myers, Executive Secretary California Native American Heritage Commission 915 Capitol Mall, Room 364 Sacramento, CA 95814

Dave Singleton, Program Analyst California Native American Heritage Commission 915 Capitol Mall, Room 364 Sacramento, CA 95814 Clayton A. Phillips, Superintendent State of California Natural Resources Agency California Department of Parks and Recreation San Diego Coast District 4477 Pacific Highway San Diego, CA 92110

Darren Smith
State of California Natural Resources Agency
California Department of Parks &
Recreation
San Diego Coast District
4477 Pacific Highway
San Diego, CA 92110

Rosa Muñoz, Senior Utilities Engineer California Public Utilities Commission Consumer Protection and Safety Division Rail Crossings Engineering Section 320 West 4th Street, Suite 500 Los Angeles, CA 90013-1105

David T. Barker, Supervising Water Resource Control Engineer California Regional Water Quality Control Board 9174 Sky Park Court, Suite 100 San Diego, CA 92123-4353

Kelly Dorsey
Senior Engineering Geologist
San Diego Region
California Regional Water Quality Control
Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4353

Nadell Gayou California Regional Water Quality Control Board P.O. Box 942836 Sacramento, CA 94236

Mike Chrisman, Secretary California Resources Agency 1416 9th Street, Suite 1311 Sacramento, CA 95814

^{*} Received a hard copy of the Executive Summary.



State Government (cont.)

Megan Cooper, Project Manager California State Coastal Conservancy 1330 Broadway, 13th Floor Oakland, CA 94612-2530

Vice Chancellor
The California State University
Attn. Contract Management
Physical Planning and Development
400 Golden Shore Boulevard
Long Beach, CA 90802-4275

State Clearinghouse
Office of Planning & Research
1400 Tenth Street
Sacramento, CA 95814

Eric Gillies, Staff Environmental Scientist* State Lands Commission Division of Environmental Planning and Management 100 Howe Avenue, Suite 100 South Sacramento, CA 95825-8202

Cy R. Oggins, Chief State Lands Commission Division of Environmental Planning and Management 100 Howe Avenue, Suite 100-South Sacramento, CA 95825-8202

Drew Simkin
Public Land Management Specialist
State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825-8202

Paul D. Thayer, Executive Officer State Lands Commission 100 Howe Avenue, Suite 100 South Sacramento, CA 95825-8202

Attn. EIR Review
California Transportation Commission
1120 N Street, Room 2221
MS-52
Sacramento, CA 94273-0001

Bimla G. Rhinehart, Executive Director California Transportation Commission 1120 N Street MS-52 Sacramento, CA 94273-0001

Tam Doduc, Chairperson
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Gary C. Matthews, Vice Chancellor University of California, San Diego Resource Management and Planning 9500 Gilman Drive, Mail Code 0005 La Jolla, CA 92093-0057

Catherine J. Presmyk,
Assistant Director, Environmental Planning
University of California, San Diego
Physical Planning Office
9500 Gilman Drive, MC 0074
La Jolla, CA 92093-0074

Brad Werdick, AICP, Director - Physical and Community Planning University of California, San Diego 9500 Gilman Drive, MC 0074 La Jolla, CA 92093-0074

State Elected Officials

The Honorable Marie Waldron* California State Assembly 75th District 350 West Fifth Ave., Suite 110 Escondido, CA 92025 The Honorable Rocky Chavez California State Assembly 76th District 1910 Palomar Point Way, Suite 106 Carlsbad, CA 92008

^{*} Received a hard copy of the Executive Summary.



State Elected Officials (cont.)

The Honorable Marty Block California State Senate 39th District 701 B Street, Suite 1840 San Diego, CA 92101 The Honorable Mark Wyland* California State Senate 38th District 1910 Palomar Point Way, #105 Carlsbad, CA 92008

Local Government

Robert Reider, Section Supervisor, Rules Air Pollution Control District 10124 Old Grove Road San Diego, CA 92131-1649

Attn. EIR Review*
Cardiff-by-the-Sea Library
2081 Newcastle Avenue
Cardiff-by-the-Sea, CA 92007

Attn. EIR Review Cardiff School District 1888 Montgomery Avenue Cardiff-by-the-Sea, CA 92007

Attn. EIR Review*
Carlsbad City Library
1775 Dove Lane
Carlsbad, CA 92011

John A. Roach, Superintendent Carlsbad Unified School District 6225 El Camino Real Carlsbad, CA 92009

Lisa Hildabrand, City Manager City of Carlsbad 1200 Carlsbad Village Drive Carlsbad, CA 92008

Kevin M. Hardy, General Manager City of Carlsbad Carlsbad Municipal Water District P.O. Box 9009 Carlsbad, CA 92018

Director
City of Carlsbad
Community Development Department
1635 Faraday Avenue
Carlsbad, CA 92008

Director
City of Carlsbad
Engineering Department
1635 Faraday Avenue
Carlsbad, CA 92008

Director City of Carlsbad Fire Department Administration 2560 Orion Way Carlsbad, CA 92010

Attn. EIR Review*
City of Carlsbad
Georgina Cole Library
1250 Carlsbad Village Drive
Carlsbad, CA 92008

Director
City of Carlsbad
Parks and Recreation
1200 Carlsbad Village Drive
Carlsbad, CA 92008

Conrad "Skip" Hammann, P.E., Transportation Director City of Carlsbad Planning Division 1635 Faraday Avenue Carlsbad, CA 92008-7314

Don Neu, AICP, City Planner City of Carlsbad Planning Division 1635 Faraday Avenue Carlsbad, CA 92008-7314

^{*} Received a hard copy of the Executive Summary.



Suzie Meyer Administrative Secretary City of Carlsbad Police Department 2560 Orion Way Carlsbad, CA 92010

Bryan Jones, Deputy Director Transportation City of Carlsbad Faraday Center 1635 Faraday Avenue Carlsbad, CA 92008

Kathleen Garcia, Planning Director City of Del Mar 1050 Camino del Mar Del Mar, CA 92014-2698

Scott Huth, City Manager City of Del Mar 1050 Camino del Mar Del Mar, CA 92014-2698

Linda Niles, Director
City of Del Mar
Department of Planning/Community
Development
1050 Camino del Mar
Del Mar, CA 92014-2698

Director
City of Del Mar
Fire Department
1050 Camino del Mar
Del Mar, CA 92014-2698

Eric Minicilli, Director City of Del Mar Public Works Department 1050 Camino del Mar Del Mar, CA 92014-2698

Gustavo Vina, City Manager City of Encinitas 505 South Vulcan Avenue Encinitas, CA 92024 Scott Henry, Fire Chief City of Encinitas Fire and Marine Safety 505 South Vulcan Avenue Encinitas, CA 92024

Lisa Rudloff, Director
City of Encinitas
Parks and Recreation
505 South Vulcan Avenue
Encinitas, CA 92024

Patrick Murphy, Director City of Encinitas Planning and Building 505 South Vulcan Avenue Encinitas, CA 92024

Larry Watt, Director City of Encinitas Public Works Department 160 Calle Magdalena Encinitas, CA 92024-3633

Peter Weiss, City Manager City of Oceanside 300 North Coast Highway Oceanside, CA 92054

Attn. EIR Review
City of Oceanside
Fire Department Headquarters
300 North Coast Highway
Oceanside, CA 92054

Dennis Martinek, Chair City of Oceanside Oceanside Planning Commission 300 North Coast Highway Oceanside, CA 92054

Director
City of Oceanside
Parks and Recreation
300 North Coast Highway
Oceanside, CA 92054

^{*} Received a hard copy of the Executive Summary.



Jerry Hittleman, City Planner City of Oceanside Planning Department 300 North Coast Highway Oceanside, CA 92054

Leonard Mata, Sergeant City of Oceanside Police Department 3855 Mission Avenue Oceanside, CA 92054

John Amberson, Transportation Planner City of Oceanside 300 North Coast Highway Oceanside, CA 92054

Director City of Oceanside Water Utilities Department 300 North Coast Highway Oceanside, CA 92054

Director
City of Oceanside
Development Services Department
300 North Coast Highway
Oceanside, CA 92054

Director
City of San Diego
City Planning and Community Investment
Planning Division
202 C Street, MS 5A
San Diego, CA 92101

Cecilia Gallardo, Assistant Deputy Director of Development Services City of San Diego Development Services Department 1222 1st Avenue, MS 501, San Diego, CA 92101

Stacey LoMedico, Director City of San Diego Parks and Recreation Department 202 C Street, MS 37C San Diego, CA 92101 Roger Bailey, Director City of San Diego Public Utilities Department 1222 First Avenue, 4th Floor San Diego, CA 92101

Jim Barrett, Director City of San Diego Water Department 600 B Street, Suite 400, MS 904a San Diego, CA 92101

David Ott, City Manager City of Solana Beach 635 South Highway 101 Solana Beach, CA 92075

Denise Olaguer City of Solana Beach City Manager's Office 635 South Highway 101 Solana Beach, CA 92075

Attn. EIR Review
City of Solana Beach
Community Development Department
635 South Highway 101
Solana Beach, CA 92075

Attn. EIR Review City of Solana Beach Fire Department 500 Lomas Santa Fe Drive Solana Beach, CA 92075

Director City of Solana Beach Parks and Recreation 635 South Highway 101 Solana Beach, CA 92075

Director City of Solana Beach Public Works Department 635 South Highway 101 Solana Beach, CA 92075

^{*} Received a hard copy of the Executive Summary.



Cheryl Goddard Land Use/Environmental Planner County of San Diego Parks and Recreation 5500 Overland Avenue, Suite 410 San Diego, CA 92123

Clerk of the Board County Administration Center 1600 Pacific Highway, Suite 310 San Diego, CA 92101

County Clerk's Office* County of San Diego 1600 Pacific Highway San Diego, CA 92101

County of San Diego Department of Parks and Recreation 5500 Overland Avenue, Suite 410 San Diego, CA 92123

Attn. EIR Review* Del Mar Library 1309 Camino del Mar Del Mar, CA 92014

Dena Whittington, Assistant Superintendent Del Mar Union School District 11232 El Camino Real Del Mar, CA 92130

Attn. EIR Review* Encinitas Library 540 Cornish Drive Encinitas, CA 92024

Attn. EIR Review Encinitas Union School District 101 South Rancho Santa Fe Road Encinitas, CA 92024

William Metcalf, Chief North County Fire Protection District 330 S. Main Avenue Fallbrook, CA 92028-2938 Kurt Luhrsen, Principal Planner North County Transit District 810 Mission Avenue Oceanside, CA 92054

Matthew O. Tucker, Executive Director North County Transit District 810 Mission Avenue Oceanside, CA 92054-2825

Attn. EIR Review*
Oceanside Public Library
330 North Coast Highway
Oceanside, CA 92054

Larry Perondi, Superintendent Oceanside Unified School District 2111 Mission Avenue Oceanside, CA 92054

Rob Rundle San Diego Association of Governments 401 B Street, Suite 800 San Diego, CA 92101

Anne Howard Steinberger, SANDAG Marketing Manager San Diego Association of Governments 401 B Street, Suite 800 San Diego, CA 92101

Shelby Tucker
San Diego Association of Governments
Areawide Clearinghouse
401 B Street, Suite 800
San Diego, CA 92101

Tina Christiansen, Director*
San Diego County Library
Solana Beach Branch
157 Stevens Avenue
Solana Beach, CA 92075

Brian Albright, Director County of San Diego Department of Parks & Recreation 5500 Overland Avenue, Suite 410 San Diego, CA 92123

^{*} Received a hard copy of the Executive Summary.



William D. Gore, Sheriff San Diego County Sheriff's Department John F. Duffy Administrative Center P.O. Box 939062 San Diego, CA 92193-9062

Donald Fowler, Captain
San Diego County Sheriff's Department Encinitas
175 North El Camino Real
Encinitas, CA 92024

Maureen Stapleton, General Manager San Diego County Water Authority 4677 Overland Avenue San Diego, CA 92123

San Diego Fire-Rescue Department Administrative Office/General Information 1010 2nd Avenue, Suite 400 San Diego, CA 92101

Attn. EIR Review
San Diego Metropolitan Transit System
1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7400

Sharon Cooney, Planning Director San Diego Metropolitan Transit System 1255 Imperial Avenue San Diego, CA 92101

Attn. EIR Review
San Diego Police Department
1401 Broadway Street
San Diego, CA 92101

William Lansdowne, Chief San Diego Police Department 1401 Broadway Street San Diego, CA 92101

Lt. Kevin Mayer San Diego Police Department Headquarters 1401 Broadway Street San Diego, CA 92101 Attn. EIR Review*
San Diego Public Library
Carmel Valley Branch Library
3919 Townsgate Drive
San Diego, CA 92130

Attn. EIR Review*
San Diego Public Library – Central
820 E Street
San Diego, CA 92101

David Gibson, Executive Officer San Diego Regional Water Quality Control Board 9174 Sky Park Court, Suite 100 San Diego, CA 92123

Stuart Hurlbert
San Diego State University
Department of Biology
5500 Campanile Drive
San Diego, CA 92182

San Diego State University College of Arts and Letters South Coastal Information Center 4283 El Cajon Boulevard, Suite 250 San Diego, CA 92105

John W. Helmer, Director San Diego Unified Port District Land Use Planning 3165 Pacific Highway San Diego, CA 92101

Attn. EIR Review San Diego Unified School District Eugene Brucker Education Center 4100 Normal Street San Diego, CA 92103

Attn. EIR Review
San Dieguito Union High School District
710 Encinitas Boulevard
Encinitas, CA 92024

^{*} Received a hard copy of the Executive Summary.



Local Elected Officials

Carlos Estrella, Chief Fiscal Officer Solana Beach School District 309 North Rios Avenue Solana Beach, CA 92075

Leslie Fausset, Superintendent Solana Beach School District 309 North Rios Avenue Solana Beach, CA 92075-1298

The Honorable Matt Hall, Mayor City of Carlsbad 1200 Carlsbad Village Drive Carlsbad, CA 92008

The Honorable Keith Blackburn, Council Member City of Carlsbad 1200 Carlsbad Village Drive Carlsbad, CA 92008

The Honorable Farrah Golshan Douglas, Council Member City of Carlsbad 1200 Carlsbad Village Drive Carlsbad, CA 92008

The Honorable Mark Packard, Mayor Pro Tem City of Carlsbad 1200 Carlsbad Village Drive Carlsbad, CA 92008

The Honorable Lorraine Wood, Council Member City of Carlsbad 1200 Carlsbad Village Drive Carlsbad, CA 92008

The Honorable Terry Sinnott, Mayor City of Del Mar 1050 Camino del Mar Del Mar, CA 92014

The Honorable Lee Haydu, Deputy Mayor City of Del Mar 1050 Camino del Mar Del Mar, CA 92014 Al Corti, Council Member City of Del Mar 1050 Camino del Mar Del Mar, CA 92014

The Honorable Sherryl Parks, Council Member City of Del Mar 1050 Camino del Mar Del Mar, CA 92014

The Honorable Don Mosier, Council Member City of Del Mar 1050 Camino del Mar Del Mar, CA 92014

The Honorable Teresa Barth, Mayor City of Encinitas 505 South Vulcan Avenue Encinitas, CA 92024

The Honorable Lisa Shaffer, Deputy Mayor City of Encinitas 505 South Vulcan Avenue Encinitas, CA 92024

The Honorable Tony Kranz, Council Member City of Encinitas 505 South Vulcan Avenue Encinitas, CA 92024

The Honorable Kristin Gaspar, Council Member City of Encinitas 505 South Vulcan Avenue Encinitas, CA 92024

The Honorable Mark Muir, Council Member City of Encinitas 505 South Vulcan Avenue Encinitas, CA 92024

The Honorable Jim Wood, Mayor* City of Oceanside 300 North Coast Highway Oceanside, CA 92054

^{*} Received a hard copy of the Executive Summary.



Local Elected Officials (cont.)

The Honorable Gary Felien, Council Member City of Oceanside 300 North Coast Highway Oceanside, CA 92054

The Honorable Jack Feller, Council Member City of Oceanside 300 North Coast Highway Oceanside, CA 92054

The Honorable Jerome Kern, Deputy Mayor City of Oceanside 300 North Coast Highway Oceanside, CA 92054

The Honorable Esther Sanchez, Council Member City of Oceanside 300 North Coast Highway Oceanside, CA 92054

The Honorable Todd Gloria, Interim Mayor City of San Diego City Administration Building, 11th Floor 202 C Street San Diego, CA 92101

The Honorable Sherri Lightner, Council Member, District 1 City of San Diego City Administration Building 202 C Street San Diego, CA 92101

The Honorable Kevin Faulconer, Council Member, District 2 City of San Diego City Administration Building 202 C Street San Diego, CA 92101

The Honorable Todd Gloria Council President, District 3 City of San Diego City Administration Building 202 C Street San Diego, CA 92101 The Honorable Myrtle Cole Council Member, District 4 City of San Diego City Administration Building 202 C Street San Diego, CA 92101

The Honorable Mark Kersey Council Member, District 5 City of San Diego City Administration Building 202 C Street San Diego, CA 92101

The Honorable Lorie Zapf, Council Member, District 6 City of San Diego City Administration Building 202 C Street San Diego, CA 92101

The Honorable Scott Sherman Council Member, District 7 City of San Diego City Administration Building 202 C Street San Diego, CA 92101

The Honorable Marti Emerald, Council Member, District 9 City of San Diego City Administration Building 202 C Street San Diego, CA 92101

The Honorable David Alvarez, Council Member, District 8 City of San Diego City Administration Building 202 C Street San Diego, CA 92101

The Honorable Mike Nichols, Mayor* City of Solana Beach 635 South Highway 101 Solana Beach, CA 92075

^{*} Received a hard copy of the Executive Summary.



Local Elected Officials (cont.)

The Honorable Thomas M. Campbell Deputy Mayor City of Solana Beach 635 South Highway 101 Solana Beach, CA 92075

The Honorable Lesa Heebner, Council Member City of Solana Beach 635 South Highway 101 Solana Beach, CA 92075

The Honorable Peter Zahn Council Member City of Solana Beach 635 South Highway 101 Solana Beach, CA 92075

The Honorable David Zito Council Member City of Solana Beach 635 South Highway 101 Solana Beach, CA 92075

The Honorable Greg Cox, Supervisor, 1st District* San Diego County Board of Supervisors 1600 Pacific Highway San Diego, CA 92101 The Honorable Dianne Jacob, Supervisor, 2nd District*
San Diego County Board of Supervisors 1600 Pacific Highway
San Diego, CA 92101

The Honorable Dave Roberts, Supervisor, 3rd District*
San Diego County Board of Supervisors 1600 Pacific Highway, Room 335
San Diego, CA 92101

The Honorable Ron Roberts, Supervisor, 4th District*
San Diego County Board of Supervisors 1600 Pacific Highway, Room 335
San Diego, CA 92101

The Honorable Bill Horn, Supervisor, 5th District* San Diego County Board of Supervisors 1600 Pacific Highway, Room 335 San Diego, CA 92101

Native American Organizations and Contacts

Barona Group of Capitan Grande Band of Mission Indians Barona Band of Mission Indians 1095 Barona Road Lakeside, CA 92040

EPA Specialist
Barona Group of Capitan Grande Band of
Mission Indians
Barona Band of Mission Indians
1095 Barona Road
Lakeside, CA 92040

Clifford LaChappa, Chairman
Barona Group of Capitan Grande Band of
Mission Indians
Barona Band of Mission Indians
1095 Barona Road
Lakeside, CA 92040

Luther Salgado, Sr., Chairman Cahuilla Band of Mission Indians 5270 Highway 371 P.O. Box 391760 Anza, CA 92086

^{*} Received a hard copy of the Executive Summary.



Ralph Goff, Chairman Campo Kumeyaay Nation 36190 Church Road, Suite 1 Campo, CA 91906

Harry Paul Cuero, Vice Chairman Campo Kumeyaay Nation 36190 Church Road, Suite 1 Campo, CA 91906

Fidel Hyde, EPA Supervisor Campo Kumeyaay Nation 36190 Church Road, Suite 1 Campo, CA 91906

Jim Velasques Coastal Gabrielino Diegueño 5776 42nd Street Riverside, CA 92509

Michael Garcia, EPA Director Ewiiaapaayp Band of Kumeyaay Indians 4054 Willows Road Alpine, CA 91901

Will Micklin, Executive Director Ewiiaapaayp Band of Kumeyaay Indians 4054 Willows Road Alpine, CA 91901

Robert Pinto, Chairperson Ewiiaapaayp Band of Kumeyaay Indians 4054 Willows Road Alpine, CA 91901

Rebecca Osuna, Chairwoman Inaja-Cosmit Band of Mission Indians 2005 South Escondido Boulevard Escondido, CA 92025-8207

Raymond Hunter Jamul Band of Mission Indians P.O. Box 612 Jamul, CA 91935

Erica M. Pinto, Vice-Chairperson Jamul Band of Mission Indians P.O. Box 612 Jamul, CA 91935 Mike Aguilar, Environmental Coordinator Juaneño Band of Mission Indians P.O. Box 25628 Santa Ana, CA 92799

David Belardes, Chairperson Juaneño Band of Mission Indians Acjachemen Nation P.O. Box 25628 Santa Ana, CA 92799

Alfred Cruz, Cultural Resources Director Juaneño Band of Mission Indians Acjachemen Nation P.O. Box 25628 Santa Ana, CA 92799

Teresa M. Romero, Chairwoman Juaneño Band of Mission Indians Acjachemen Nation P.O. Box 25628 Santa Ana, CA 92799

Jacque S. Tahuka-Nunez, Vice-Chairwoman Juaneño Band of Mission Indians Acjachemen Nation P.O. Box 25628 Santa Ana, CA 92799

Anita Espinoza
Juaneño Band of Mission Indians
Acjachemen Nation
1740 Concerto Drive
Anaheim, CA 92807

Sonia Johnston, Chairperson Juaneño Band of Mission Indians Acjachemen Nation P.O. Box 25628 Santa Ana, CA 92799

Joyce Perry, Tribal Manager & Cultural Resources Juaneño Band of Mission Indians Acjachemen Nation 4955 Paseo Segovia Irvine, CA 92675

^{*} Received a hard copy of the Executive Summary.



Anthony Rivera, Jr., Chairperson Juaneño Band of Mission Indians Acjachemen Nation 31411-A La Matanza Street, Suite A San Juan Capistrano, CA 92675-2674

Steve Banegas, Spokesperson Kumeyaay Cultural Repatriation Committee 1095 Barona Road Lakeside, CA 92040

Ron Christman Kumeyaay Cultural Historic Committee 56 Viejas Grade Road Alpine, CA 91901

Paul Cuero Kumeyaay Cultural Heritage Preservation 36190 Church Road, Suite 5 Campo, CA 91906

Carmen Lucas Kwaaymil Laguna Beach Band of Mission Indians P.O. Box 775 Pine Valley, CA 91962

James Trujillo, Vice-Chairperson La Jolla Band of Luiseño Indians 22000 Highway 76 Pauma Valley, CA 92061

LaVonne Peck, Chairperson La Jolla Band of Luiseño Indians 22000 Highway 76 Pauma Valley, CA 92061

Rob Roy, Environmental Director La Jolla Band of Luiseño Indians 22000 Highway 76 Pauma Valley, CA 92061

EPA Director La Posta Band of Mission Indians P.O. Box 1120 Boulevard, CA 91905 Gwendolyn Parada, Chairperson La Posta Band of Mission Indians P.O. Box 1120 Boulevard, CA 91905

Evelyn Duro, Tribal Administrator Los Coyotes Band of Cahuilla and Cupeño Indians P.O. Box 189 Warner Springs, CA 92086-0189

Shane Chapparosa, Tribal Spokesperson Los Coyotes Band of Cahuilla and Cupeño Indians P.O. Box 189 Warner Springs, CA 92086-0189

Melody Sees, Environmental Director Los Coyotes Band of Cahuilla and Cupeño Indians P.O. Box 189 Warner Springs, CA 92086-0189

Leroy Elliot, Chairperson Manzanita Band of Mission Indians P.O. Box 1302 Boulevard, CA 91905

EPA Director
Manzanita Band of Mission Indians
P.O. Box 1302
Boulevard, CA 91905

Mark Romero, Chairperson Mesa Grande Band of Mission Indians P.O. Box 270 Santa Ysabel, CA 92070

Shasta C. Gaughen, Tribal Historic Preservation Officer Pala Band of Mission Indians Cupa Cultural Center 35008 Pala-Temecula Road, PMB 50 Pala, CA 92059

Robert Smith, Tribal Chairman Pala Band of Mission Indians 12196 Pala Mission Road Pala, CA 92059

^{*} Received a hard copy of the Executive Summary.



Bennae Calac, Council Member Pauma Band of Luiseño Indians P.O. Box 369 Pauma Valley, CA 92061

Randall Majel, Chairperson Pauma Band of Luiseño Indians P.O. Box 369 Pauma Valley, CA 92061

Raymond Basquez Pechanga Band of Mission Indians P.O. Box 1477 Temecula. CA 92593

Mark Macarro, Chairperson Pechanga Band of Mission Indians P.O. Box 1477 Temecula, CA 92593

Rose Duro Rincon Band of Luiseño Indians Cultural Committee 1 West Tribal Road Valley Center, CA 92082

Stephanie Spencer, Chairperson Rincon Band of Luiseño Indians Rincon Heritage Commission 1 West Tribal Road Valley Center, CA 92082

Bo Mazzetti, Tribal Chairman Rincon Band of Luiseño Indians 1 West Tribal Road Valley Center, CA 92082

Tribal Historic Preservation Officer Rincon Band of Luiseño Indians 1 West Tribal Road Valley Center, CA 92082

Tiffany Wolfe, EPA Rincon Band of Luiseño Indians 1 West Tribal Road Valley Center, CA 92082 Henry Contreras, Council Member San Luis Rey Band of Luiseño Indians 1763 Chapulin Lane Fallbrook, CA 92028

Merri Lopez-Keifer, Tribal Legal Counsel San Luis Rey Band of Luiseño Indians 1889 Sunset Drive Vista, CA 92081

Carmen Mojado, Co-Chairperson San Luis Rey Band of Luiseño Indians 1889 Sunset Drive Vista, CA 92081

Russell Romo, Chairperson San Luis Rey Band of Luiseño Indians 12064 Old Pomerado Drive Poway, CA 92064

Mel Vernon, Captain San Luis Rey Band of Luiseño Indians P.O. Box 1 Pala, CA 92059

Allen E. Lawson, Jr., Chairperson San Pasqual Band of Mission Indians P.O. Box 365 Valley Center, CA 92082

David Largo, Cultural Resource Manager Santa Rosa Band of Cahuilla Indians P.O. Box 65200 Hwy. 74 Mountain Center, CA 92539

Clint Linton, Director of Cultural Resources Santa Ysabel Band of Diegueño Indians P.O. Box 507 Santa Ysabel, CA 92070

Virgil Perez, Spokesperson lipay Nation of Santa Ysabel Band of Diegueño Indians P.O. Box 130 Santa Ysabel, CA 92070

^{*} Received a hard copy of the Executive Summary.



Erica Helms-Schenk, Environmental Director Soboba Band of Luiseño Indians P.O. Box 487 San Jacinto, CA 92581

Rosemary Morillo, Chairperson Soboba Band of Luiseño Indians P.O. Box 487 San Jacinto, CA 92581

Joseph Ontiveros, Director Soboba Cultural Resources Department P.O. Box 487 San Jacinto, CA 92581

Sydney Morris, Environmental Coordinator Sycuan Band of the Kumeyaay Nation 1 Kwaaypaay Court El Cajon, CA 92019 Daniel Tucker, Chairperson Sycuan Band of the Kumeyaay Nation 1 Kwaaypaay Court El Cajon, CA 92019

Dean Mike, Chairperson Twenty-Nine Palms Band of Mission Indians 46-200 Harrison Place Coachella, CA 92236

Tribal EPA
Twenty-Nine Palms Band of Mission Indians
47-250 Dillon Road
Coachella. CA 92236

Anthony R. Pico, Chairperson Viejas Band of Kumeyaay Indians P.O. Box 908 Alpine, CA 91903

Interested Companies, Organizations, Citizens and Community Planning Groups

Faeren Adams 4584 Georgia Street, #4 San Diego, CA 92116

Mike Melts, Board Chair Agua Hedionda Lagoon Foundation 1580 Cannon Road Carlsbad, CA 92008

Douglas Alden 610 Marine View Avenue Del Mar, CA 92104

Bruce Allen 660 N. Granados Avenue Solana Beach, CA 92075

Scott J. Allen 2750 Wheatstone, No. 19 San Diego, CA 92111

Carolyn Ames 2923 Cape Sebastian Place Cardiff-by-the-Sea, CA 92007 Linda Andrews 13220 Ocean Vista Road San Diego, CA 92130

Andy Anson 1028 Pine Avenue Carlsbad, CA 92008

Cecilia Kemper Arroyo Sorrento Homeowner's Association P.O. Box 2183 Del Mar, CA 92014

Jill McCarty Arroyo Sorrento Property Owners 3929 Arroyo Sorrento Road San Diego, CA 92130

Jerry Schaefer, Ph.D. ASM Affiliates 2034 Corte Nogal Carlsbad, CA 92009

^{*} Received a hard copy of the Executive Summary.



Joan Bach 13094 Portofino Drive Del Mar, CA 92014

Frances Bachman 1134 San Ricardo Court Solana Beach, CA 92045

Joseph Bachman 1134 San Ricardo Court Solana Beach, CA 92075

Carol Ball 120 S. Kihridge Lane Encinitas, CA 92024

Janice Barnard 12777 Via Esperia Del Mar, CA 92014

Teresa Barth 2140 K Orinda Drive Cardiff-by-the-Sea, CA 92007

Robert L. Barto 8803 Robinhood Lane La Jolla, CA 92037-2138

Anthony S. Basile 6944 Waters End Drive Carlsbad, CA 92011

Fred C. Sandquist, President and Board Member Batiquitos Lagoon Foundation P.O. Box 130491

Charlie Baumgart 139 Ebano Court Solana Beach, 92075

Carlsbad, CA 92013

Phyllis Baumgart 139 Ebano Court Solana Beach, CA 92075

Laurie Beach 560 Gardena Court Encinitas, CA 92024 Tim Bearden 4216 Thomas Street Oceanside, CA 92056

William Beck 760 San Mario Drive Solana Beach, CA 92075

Sharon Beckas 7465 Olivetas Ave., Apt. 221 La Jolla, CA 92037

Carol Becker 2120 Via Mar Valle Del Mar, CA 92014-3627

Geraldine Beckord 201 Mangano Circle Encinitas, CA 92024

Tom Beckord 201 Mangado Circle Encinitas, CA 92024

Barbara Beeby 6706 Clover Street Carlsbad, CA 92011

John Bell 2345 Kettner Boulevard San Diego, CA 92101

Amy Hoyt Bennett 824 Del Rio Avenue Encinitas, CA 92024

Amy Besser 433 Dell Court Solana Beach, CA 92075

Chris Betancourt 45298 Esplendor Court Temecula, CA 92592

Joan Bockman 1017 Alberta Avenue Oceanside, CA 92054

^{*} Received a hard copy of the Executive Summary.



Jill Bodenbach 361 Carmel Creeper Place Encinitas, CA 92024

Diane E. Bond Bleiler & Bond APC 12555 High Bluff Drive, Suite 150 San Diego, CA 92130

Ellie Bonner 7357 Gabbiano Lane Carlsbad, CA 92011

Vernon Bonner 7357 Gabbiano Lane Carlsbad, CA 92011

Kelly and Roger Boyd 802 Devonshire Encinitas, CA 92024

Mary Jane Boyd 1304 Via Mil Cumbres Solana Beach, CA 92075

Roger Boyd 1304 Via Mil Cumbres Solana Beach, CA 92075

Cheryl Bray 671 Dell Street Solana Beach, CA 92075

Robin E. Brey 521 Sweet Pea Place Encinitas, CA 92024

Rick Brooks 669 Ida Avenue Solana Beach, CA 92075

Daniel J. Brown 13259 Portofino Drive Del Mar, CA 92014

James L. Brown 280 La Veta Avenue Encinitas, CA 92024 Jervis D. Brown 579 La Costa Avenue Encinitas, CA 92024

Brown Family Trust 561 La Costa Avenue Encinitas, CA 92024

Kim Brownell 1786 Swallowtail Road Encinitas, CA 92024

Joan M. Herskowitz Conservation Co-chair Buena Vista Audubon Society P.O. Box 480 Oceanside, CA 92049

Dennis Huckabay, President Buena Vista Lagoon Foundation P.O. Box 4516 Carlsbad, CA 92008

Ronald W. Wottoon, Executive Director Buena Vista Lagoon Foundation P.O. Box 4516 Carlsbad, CA 92018

Joan Bullock 1800 Bayberry Drive Oceanside, CA 92054

Mike Bullock 1800 Bayberry Drive Oceanside, CA 92054

Tony Burger 372 Glencrest Solana Beach, CA 92075

Martin Buser 430 South Nardo Avenue Solana Beach, CA 92075

Alisa Burns California Native Plant Society 2707 K Street, Suite 1 Sacramento, CA 95816-5113

^{*} Received a hard copy of the Executive Summary.



Frank Landis, Conservation Chair California Native Plant Society, San Diego Chapter P.O. Box 121390 San Diego, CA 92112-1390

California Wildlife Federation P. O. Box 1527 Sacramento, CA 95812-1527

Sheila S. Cameron 1662 Candor Drive Leucadia, CA 92024

Craig Campion 631 Poinsettia Park Court Encinitas, CA 92024

Lisa Canning 7605 Norvanyon Way San Diego, CA 92126

Mary Cappadonna 1014 Laguna Drive, No. 5 Carlsbad, CA 92008

Walter Carlin 14024 Rue Dazur Del Mar, CA 92014

Carlsbad Chamber of Commerce 5934 Priestly Drive Carlsbad, CA 92008

Kim Carlson 1529 LauraLynn Place Oceanside, CA 92054

Isabelle Kay Carmel Mountain Conservancy UCSD Natural Reserve System 9500 Gilman Drive San Diego, CA 92093-0116

Joetta Mihalovic, Chair Carmel Mountain Ranch Community Council 11705 Aldercrest Point San Diego, CA 92131-3861 Frisco White, Chair Carmel Valley Community Planning Board 5335 Camino Exquisito San Diego, CA 92130

Carmel Valley Community Service Center 3840 Valley Centre Drive, Ste. 602, MS 101 San Diego, CA 92130

John Northrup Carmel Valley Trail Riders Coalition 7015 Vista del Mar Avenue La Jolla, CA 92037

Carol Carr 11305 Carmel Creek Road San Diego, CA 92130

Thomas W. Carr 13672 Mango Drive Del Mar, CA 92014

Gloria Carranza 2215 Nob Hill Drive Carlsbad. CA 92008

Gloria Carranza 1015 Chestnut Avenue, B3 Carlsbad, CA 92008

Cassie Carter 446 Carmel Creeper Place Encinitas, CA 92024

Joel S. Moskowitz, General Counsel Caruso Acquisition Company II, LLC On behalf of San Diego Gas & Electric 101 The Grove Drive Los Angeles, CA 90036

Center for Biological Diversity PMB 447, 8033 Sunset Boulevard San Diego, CA 90046-2401

Nadine Cerqua 765 Stratford Drive Encinitas, CA 92024

^{*} Received a hard copy of the Executive Summary.



David Chadwick 4403 Highland Drive Carlsbad, CA 92008

Jen Charat 4981 Sanshore Court San Diego, CA 92130

Don Christiansen 3715 Longview Drive Carlsbad, CA 92010

Steven J. Goetsch, Ph.D., Chair Citizens Against Freeway Expansion (CAFE) 837 Santa Rosita Solana Beach, CA 92075

Dave Clemons 543 Glenmont Drive Solana Beach, CA 92075-1312

Duncan McFetridge Cleveland National Forest Foundation P.O. Box 779 Descanso, CA 91916

Marco Gonzalez, Executive Director Coastal Environmental Rights Foundation 1140 South Coast Highway 101 Encinitas, CA 92024

Rachelle Collier 287 Hillcrest Drive Encinitas, CA 92024

Andrew Concors 1632 Olmeda Encinitas, CA 92024

Jim Coniglio 854 Heather Lane Carlsbad, CA 92011

Don Connors 921 Begonia Court Carlsbad, CA 92009

Peter R. Conrad 349 Carmel Creeper Place Encinitas, CA 92024 Jill Cooper 1019 San Patricio Drive Solana Beach, CA 92075

Jeff Cours 417 Santa Dominga Solana Beach, CA 92075

Judy Cours 263 La Barranca Drive Solana Beach, CA 92075

Andrew Crane 1834 Pleasantdale Drive Encinitas, CA 92024

Peggy Crane 2297 Bryant Drive Carlsbad, CA 92008

Marty Gigler Crest Canyon Citizens Advisory Committee 13931 Durango Drive Del Mar, CA 92014

Mike Crull 1836 Marlinda Way El Cajon, CA 92021

John B. Cumming 2855 Carlsbad Boulevard, N116 Carlsbad, CA 92008

Kevin Cummins 1691 Eolus Avenue Leucadia, CA 92024

Jim Curl 13765 Mira Montana Drive San Diego, CA 92014

Dawn Curtis 354 Carmel Creeper Place Encinitas, CA 92024

Jeff Curtis 354 Carmel Creeper Place Encinitas, CA 92024

^{*} Received a hard copy of the Executive Summary.



Laura Dahan 741 Santa Florencia Solana Beach, CA 92075

Elaine Daily 802 Santa Regina Solana Beach, CA 92075

John Daily 802 Santa Regina Solana Beach, CA 92075

Rod Riggs, Managing Editor Daily Transcript P.O. Box 85469 San Diego, CA 92138-5469

Cindy Davenport 541 Crouch Street Oceanside, CA 92054

Michael Davidson 720 Sonrisa Street Solana Beach, CA 92075

Andres Davis 671 Ida Avenue Solana Beach, CA 92075

Joe Dawson 123 Triton Circle Encinitas, CA 92024

John Debeer 1630 Burgundy Road Encinitas, CA 92024

Deborah DeBow PO Box 675922 Rancho Santa Fe, CA 92067-5922

Darius John Degher 171 Sanford Street Encinitas, CA 92024

Everett DeLano DeLano & DeLano 220 W. Grand Avenue Escondido, CA 92025 Darlena Del Mar 832 Ida Avenue Solana Beach, CA 92075

Timothy Fennell, General Manager 22nd District Agricultural Association Del Mar Fairgrounds 2260 Jimmy Durante Boulevard Del Mar, CA 92014

Dustin Fuller, Sr. Environmental Planner 22nd District Agricultural Association Del Mar Fairgrounds 2260 Jimmy Durante Boulevard Del Mar, CA 92014

Paul Metcalf, Chair Del Mar Mesa Community Planning Board 5681 Bellevue Avenue La Jolla, CA 92037

Nancy Wasko
Del Mar Regional Chamber of Commerce
1104 Camino del Mar, Suite 1
Del Mar, CA 92014

Del Mar Terrace Property Owners Association 12716 Via Grimaldi Del Mar, CA 92014

Ann Dempsey P.O. Box 116 (1250 Crest Road) Del Mar, CA 92014

Faye Detsky-Weil 13464 Calais Drive Del Mar, CA 92014-3524

Russ Detweiler 1041 Monterey Vista Way Encinitas, CA 92024

Eleni DeVall 4213 Cielo Avenue Oceanside, CA 92056

Angela DeVargas 3218 Eureka Place Carlsbad, CA 92008

^{*} Received a hard copy of the Executive Summary.



Jim Dietz 458 Holmwood Lane Solana Beach, CA 92075

John DiGiacomo 3471 Jefferson Street Carlsbad, CA 92008

Michael DiPuetro 534 Sweet Pea Place Encinitas, CA 92024

Darius John Dither 171 Sanford Street Encinitas, CA 92024

Marion Dodson Box 1990 Rancho Santa Fe, CA 92067

Mary Dokken 2810 Pine Avenue, Carlsbad, CA 92008

Law Offices of David R. Thompson On Behalf of Mary Dokken 580 Beech Avenue, Suite C Carlsbad, CA 92008

Dawn Douglas 13190 Carousel Lane Del Mar, CA 92014

Bradley L. Dow II 1460 Orpheus Avenue Encinitas, CA 92024

Courtney Dow 1460 Orpheus Avenue Encinitas, CA 92024

Carl and Mary Dreibelbis 1210 Laguna Street Oceanside, CA 92054

Neil Ducker 1446 Moreno Street Oceanside, CA 92054 C. Faye Duggan 5861 Harbor Street San Diego, CA 92122

J. Duncan 6927 Whitecap Drive Carlsbad, CA 92011

Otto Emme 2290 Via Lucia San Diego, CA 92037

Michael Klein, D.M.D., President Encinitas Chamber of Commerce 1106 Second Street, #112 Encinitas, CA 92024

Michael Beck, San Diego Director Endangered Habitats League 615 La Cresta Boulevard Crest, CA 92021

Sean Englert 6992 Sandcastle Drive Carlsbad, CA 92011

Charles Evendorff 1645 MacKinnon Avenue Cardiff-by-the-Sea, CA 92007

Peter K. Fagen 1 Civic Center Drive, Suite 300 San Marcos, CA 92069

Brett Farrow 125 Mozart Avenue. Cardiff-by-the-Sea, CA 92007

Robert Feher 924 Santa Queta Solana Beach, CA 92075

Doug Fiske 157C West Glaucus Street Encinitas, CA 92024

Heidi Franczyk 810 Leonard Avenue Oceanside, 92054

^{*} Received a hard copy of the Executive Summary.



Karen Fraser 283 Hillcrest Drive Encinitas, CA 92024

Linda Fredin 557 San Mario Drive Solana Beach, CA 92075

Jacqueline Winterer Friends of the San Dieguito River Valley P.O. Box 973 Del Mar, CA 92014

Maggie Brown, President Friends of the San Dieguito River Valley P.O. Box 973 Del Mar, CA 92014

Friends of Los Peñasquitos Canyon Preserve P.O. Box 26523 San Diego, CA 92196

Deborah Knight Friends of Rose Canyon 6804 Fisk Avenue San Diego, CA 92122

David Frisk 767 Orpheus Avenue Encinitas, CA 92024

Gary Frost 557 San Mario Drive Solana Beach, CA 92075

Jim Gale 1417 Eastview Court Oceanside, CA 92056

Chris & Karie Galindo P.O. Box 130752 Carlsbad, CA 92013

Joe Gallagher 515 Vine Street Oceanside, CA 92055

Vicky Gallagher 3834 Fallon Circle San Diego, CA 92130 G. Gardner 543 Windsock Way Carlsbad, CA 92011

James and Mary Geary 2530 Davis Avenue Carlsbad, CA 92008

Jessica Geipel 1923 Park Crest Drive Cardiff-by-the-Sea, CA 92007

Jesse Giessow 1003 Hygeia Avenue Encinitas, CA 92024

Jim Gilbert 409 Hoover Street Oceanside, CA 92056

Dan Gilleon 13413 Racetrack View Court San Diego, CA 92014

Pierre Godefroy 13151 Shalimar Place Del Mar, CA 92014

Harvey Goldman 14082 Mango Drive Del Mar, CA 92014

David Golman 404 Andrew Avenue Encinitas, CA 92024

Dr. Dolores G. Gonzales 110 Mangano Circle Encinitas, CA 92024

Ruben Gonzales 110 Mangano Circle Encinitas, CA 92024

Jane Goodman 577 Silver Berry Place Encinitas, CA 92024

^{*} Received a hard copy of the Executive Summary.



Diana Gordon 12229 Carmel Vista Road, #252 San Diego, CA 92130

Julie Graboi 1314 Desert Rose Way Encinitas, CA 92024

Veronica Grandpre 838 Ida Avenue Solana Beach, CA 92075

Kevin Grant 2746 Caminito Cedros Del Mar, CA 92014

Katherine Green 1419 Willowview Court Encinitas, CA 92024

Pete Zahn, Chairman Green Chamber of San Diego County 4542 Ruffner Street, Suite 110 San Diego, CA 92111

Nicole Capretz, Director Green Energy/Good Jobs Initiative Environmental Health Coalition 2727 Hoover Avenue, Suite 202 National City, CA 91950

Irina Gronborg 424 Dell Court Solana Beach, CA 92075

Louie Guassac P.O. Box 270 Santa Ysabel, CA 92070

Thomas Guminski, Staff Engineer Components Engineering 5775 Morehouse Drive San Diego, CA 92121

Danna Gunther 685 Sweet Pea Place Encinitas, CA 92024 Harry Guzelimian 1046 Santa Florencia Solana Beach, CA 92075

Allen M. Jones, Vice President Land Planning and Development H.G. Fenton Company 7577 Mission Valley Road, #200 San Diego, CA 92108

Diane Hardison 813 Santa Rosita Solana Beach, CA 92075

Dr. James M. Hardison, Ph.D. 803 Santa Rosita Solana Beach, CA 92075

Marguerite Harkins 1909 Playa Riviera Drive Cardiff-by-the-Sea, CA 92007-1431

Florence Harrod 139 Cerro Street Encinitas, CA 92024

Joel Hartley 212 S. Rios Avenue Solana Beach, CA 92075

Doug & Sheryl Harvey 2747 Caminito Cedros Del Mar, CA 92014

Susan Harvey 1129 Sycamore View Drive Encinitas, CA 92024

John Haughey, M.D. 904 Shore Crest Road Carlsbad, CA 92011

Anne Hawkins 2427 Caminito Ocean Cove Cardiff-by-the-Sea, CA 92007

Mary Hayward P.O. Box 20863 El Cajon, CA 92019

^{*} Received a hard copy of the Executive Summary.



Susie Hedrick 434 Santa Dominga Solana Beach, CA 92075

Judy Hegenauer 431 Glenmont Drive Solana Beach, CA 92075

Jane Hendricks 1218 Sidonia Street Encinitas, CA 92024

Paul Henkart 918 Santa Hidalga Solana Beach, CA 92075

Juanito H. Maravilla, Legal Secretary Shute, Mihaly & Weinberger, LLP On Behalf of Paul Henkart 396 Hayes Street San Francisco, CA 94102

Luther/Virginia Herrle 1442 Moreno Street Oceanside, CA 92054

Laura Herron 3627 Voyager Circle San Diego, CA 92130

David Herskowitz 1175 Kildeer Court Encinitas, CA 92024

Joan Herskowitz 1175 Kildeer Court Encinitas, CA 92024

Cody Hewitt 542 Sweet Pea Place Encinitas, CA 92024

Lisa Hewitt Nova Biologics, Inc. 1714 Ord Way Oceanside, CA 92056 Lauren Hinton 341 Carmel Creeper Place Encinitas, CA 92024

Bobbie Hoder, President, Board of Directors Hospice of the North Coast 2525 Pio Pico Drive, Suite 301 Carlsbad, CA 92008

Sara Hoff 1089 Evergreen Drive Encinitas, CA 92024

Victoria Holman 1023 Santa Florencia Solana Beach, CA 92075

Sara Honadle 1040 South Coast Highway 101 Encinitas, CA 92024

Harland Huftel 7450 Altiva Place Carlsbad, CA 92009

Dennis Huiras 13439 Portofino Drive Del Mar, CA 92014

Yvonne Huiras 13439 Portofino Drive Del Mar, CA 92014

Karen Iwrey 702 West Solana Circle Solana Beach, CA 92075

Ellen Jenne 4226 Mt. Henry Avenue San Diego, CA 92117

Dana Johnson 816 Caminito del Mar Carlsbad, CA 92011

Penny Johnson 1360 Hillview Court Carlsbad, CA 92008

^{*} Received a hard copy of the Executive Summary.



Jeanne Jones 1742 Swallowtail Road Encinitas, CA 92024

Michael Jones 4444 Via Amable San Diego, CA 92122

Gary Joynes 963 Robley Place Cardiff-by-the-Sea, CA 92007

Allan Juliussen 1935 Leucadia Scenic Court Encinitas, CA 92024

Hitomi Kawashima 5173 Great Meadow Drive San Diego, CA 92130

Richard Kennedy 1465 Ravean Court Encinitas, CA 92024

Mike Kilcoin 13404 Portofino Drive Del Mar, CA 92014

Janet King 908 Stevens Avenue Solana Beach, CA 92075

Kate King 901 San Juan Place Oceanside, CA 92058

Robert Kingston 724 Camino Santa Barbara Solana Beach, CA 92075

Carol Kissin 5162 Prado Court Oceanside, CA 92057

Shirley Klein 141 Turner Avenue Encinitas, CA 92024 Ora Lee Klemme 602 S. Nevada Street Oceanside, CA 92054

Helen E. Klich 1005 Highland Drive Del Mar, CA 92014

Jason Knapp 1253 Santa Luisa Drive Solana Beach, CA 92075

Thomas E. & Margaret L. Knothe 13724 Sagewood Drive Poway, CA 92064

James H. Knott, III 127 Sherri Lane Oceanside, CA 92054

Connie Knox 516 Monterey Drive Oceanside, CA 92058

Dorothy H. Knox 13019 Longboat Way Del Mar, CA 92014

Ron & Noreen Kolek 594 Sweet Pea Place Encinitas, CA 92024

Kyle Krahel-Frolander 570 Hidden Canyon Way, Unit C Oceanside, CA 92054

Jill Kramer 618 Silver Berry Place Encinitas, CA 92024

Ursula Krane 13627 Calais Drive Del Mar, CA 92014

Kerrin Krause 1220 Stratford Lane Carlsbad, CA 92008

^{*} Received a hard copy of the Executive Summary.



Diana & Jay Kutlow 1634 Glasgow Avenue Cardiff-by-the-Sea, CA 92007

James "Jimmy" Knott
La Salina Home and Oceanside Mobile
Home Alliance Director
Homeowners/
Residents Representative
La Salina Mobile Village
1550 South Coast Highway
Oceanside, CA 92054

Howard LaGrange 2575 Jason Court Oceanside, CA 92056

Elizabeth Landeros 1028 Pine Avenue Carlsbad. CA 92008

Richard C. Lantz 2844 Wilson Street Carlsbad, CA 92008

Catherine Lanzi 501 Sweet Pea Place Encinitas, CA 92024

Abi Lawrance 835 Stratford Drive Encinitas, CA 92024

Kimberly Lawrence 357 Carmel Creeper Place Encinitas, CA 92024

Lynda Laws 926 Nolbey Street Cardiff-by-the-Sea, CA 92007

Frank D. Layton 962 Santa Hidalga Solana Beach, CA 92075

Shirley Layton 962 Santa Hidalga Solana Beach, CA 92075 James Lazar 802 SkySail Avenue Carlsbad, CA 92011

Diane Mochizuki, Natural Resources Director League of Women Voters North Coast San Diego County P.O. Box 131272 Carlsbad, CA 92013

Mary LeBlanc 834 Bluewater Road Carlsbad, CA 92011

Freda Lee 1403 Willowview Court Encinitas, CA 92024

Sam Lee 545 Sweet Pea Place Encinitas, CA 92024

Linda Collins Leigh 1938 Playa Riviera Drive Cardiff-by-the-Sea, CA 92007

Charles Leighton 462 Santa Alicia Solana Beach, CA 92075

Gerald Lelais 3965 Caminito del Mar Surf San Diego, CA 92130

Carolyn Manning, Secretary Leucadia Village Homeowners Association Board of Directors 502 Southbridge Court Encinitas, CA 92024

Paul Bushee, General Manager Leucadia Wastewater District 1960 La Costa Avenue Carlsbad, CA 92009

Robert Lewis 13713 Recuerdo Drive Del Mar, CA 92014

^{*} Received a hard copy of the Executive Summary.



Tom Liegler
P.O. Box 3322

Rancho Santa Fe, CA 92067

Kathleen Lindemann 518 Southbridge Encinitas, CA 92024

Maria Lindley 940 Urania Avenue Encinitas, CA 92024

Ron Lindley 940 Urania Avenue Encinitas, CA 92024

Roxy Linfesty 809 Kalpati Circle, #325 Carlsbad, CA 92008

Eric Lodge 507 Morview Lane Solana Beach, CA 92075

Jeff & Ginny Lorenz 749 Poinsettia Park South Encinitas, CA 92024

Geoffrey Smith Los Peñasquitos Canyon Preserve Citizens Advisory Committee 1512 Frederick Street Santa Rosa, CA 95401

Mike Hastings, Executive Director Los Peñasquitos Lagoon Foundation P.O. Box 940

Cardiff-by-the-Sea, CA 92007

Clare Luconi 6907 Quiet Cove Drive Carlsbad, CA 92011

Jeff Lyle 1033 Solana Drive Del Mar, CA 92014 Shari Mackin 1469 Moreno Street Oceanside, CA 92054

Don MacLeod 536 South Rios Avenue Solana Beach, CA 92075

Kristin MacLeod 536 S. Rios Avenue Solana Beach, CA 92075

Jim Madrid 1436 Peartree Court Encinitas, CA 92024

Magnin Residence 7153 Linden Terrace Carlsbad, CA 92011

Art Magnuson 5209 Caminito Vista Lujo San Diego, CA 92130

Gracinda Maier 942 San Lorenzo Solana Beach, CA 92075

Jean Marchese 1615 Olmeda Street Encinitas, CA 92024

Lisa Margolin-Feher 991c Lomas Santa Fe Drive, Suite 424 Solana Beach, CA 92075

Mariarosa Daniela Marshall 419 S. Weitzel Street P.O. Box 2929 Oceanside, CA 92054

Nancy Matus 1842 Playa Riviera Drive Cardiff-by-the-Sea, CA 92007

Larry May 6873 Mimosa Drive Carlsbad, CA 92011

^{*} Received a hard copy of the Executive Summary.



Les Mazer 681 Crete Court Encinitas, CA 92024

Brian McCabe 657 Sweet Pea Place Encinitas, CA 92024

Dina McCabe 657 Sweet Pea Place Encinitas, CA 92024

Jessica McClenny 447 Carmel Creeper Place Encinitas, CA 92024

Maria McEneany P.O. Box 2631 Rancho Santa Fe, CA 92067

Judy McFarland 1511 California Street Oceanside, CA 92054

"Plumber" Scott McGervery 830 Citrus Place Carlsbad, CA 92008

Michael E. McGinley P.E. 3340 Santa Carlotta Street La Crescenta, CA 91214

Moira McGrain 2460 Malibu Way Del Mar, CA 92014

Marilee McLean 639 Santa Rosita Solana Beach, CA 92075

Kym McQuiston 917 Urania Avenue Encinitas, CA 92024

Samantha Melone 574 Sweet Pea Place Encinitas, CA 92024 Shelley Melone 574 Sweet Pea Place Encinitas, CA 92024

Kyle Menzies Marci Manenson 2524 Davis Avenue Carlsbad, CA 92008

Timothy Brick, Chair
The Metropolitan Water District of Southern
California
P.O. Box 54153
Los Angeles, CA 90054

John Metzger 912 Santa Hidalga Solana Beach, CA 92075

Thomas Metzger 1510 Sunrise Circle Carlsbad, CA 92008

Catherine L. Miller 640 Poinsettia Park N. Encinitas, CA 92024

Susan Miller 2469 Oakridge Cove Del Mar, CA 92014

William E. Miller 639 Glenmont Drive Solana Beach, CA 92075-1314

Sandy Mills 633 Glencrest Place Solana Beach, CA 92075

Dillon Miner 3624 Texas Street San Diego, CA 92104

Eric Molldrem 225 Pacific View Lane Encinitas, CA 92024

^{*} Received a hard copy of the Executive Summary.



Rene C. Monge 139 Iguala Court Solana Beach, CA 92075

Margie Monroy 749 B. Magnolia Avenue Carlsbad, CA 92008

Mario Monroy 749 Magnolia Avenue, Unit B Carlsbad, CA 92008

Nancy Morgan 1096 Urania Avenue Encinitas, CA 92024

Bruce Mortland 2297 Dunstan Road Oceanside, CA 92054

Robbin Muller 724 Poinsettie Park S. Encinitas, CA 92024

Joan Mumford 1944 Playa Riviera Drive Cardiff-by-the-Sea, CA 92007

Linda Musengo 655 Ida Avenue Solana Beach, CA 92075

Zeb Navarro 1316 Buena Street Oceanside, CA 92058

Suzi Nawarabi 1915 Playa Riviera Drive Cardiff-by-the-Sea, CA 92007

Gwen and Jack Nelson 1360 Las Flores Drive Carlsbad, CA 92008

Gary Nessin 2987 Highland Drive Carlsbad, CA 92008 Paul Nevans 2014 Mountain Vista Way Oceanside, CA 92054

Teresa Nevarez 443 Carmel Creeper Place Encinitas, CA 92024

Sharon Newbery 1212 Vista Way Oceanside, CA 92054

Todd Neyer 393 Orpheus Avenue Encinitas, CA 92024

Michael Nixon 438 Carmel Creeper Place Encinitas, CA 92024

George L. Piantka, P.E. NRG Energy, West Region 5790 Fleet Street, Suite 200 Carlsbad, CA 92008

Dianna Nunez 339 Hillcrest Drive Encinitas, CA 92024

Rich O'Brien 414 Carmel Creeper Place Encinitas, CA 92024

Jim Schroder Oceanside Economic Development Commission 4020 Wooster Drive Oceanside, CA 92056

Oceanside Chamber of Commerce 928 North Coast Highway Oceanside, CA 92054

Paul Ocheltree 200 Marine View Avenue Del Mar, CA 92014-3935

Mike O'Connell 1044 Laguna Drive, No. 18 Carlsbad, CA 92008

^{*} Received a hard copy of the Executive Summary.



Clint O'Conner 760 Munevar Road Cardiff-by-the-Sea, CA 92007

Michael Glenn O'Grady 220 E. Glaucus Street Encinitas, CA 92024-1604

Don Omsted 1349 Rainbow Ridge Lane Encinitas, CA 92024

Frank Paiano 2320 Soto Street San Diego, CA 92107

Wendy Palfrey 335 Andrew Avenue Leucadia, CA 92024

Pardee Construction Co. 6025 Edgewood Bend Court San Diego, CA 92130

Kevin Patrick 12963 Via Latina Del Mar, CA 92014

Nancy M. Patton 565 Sweet Pea Place Encinitas, CA 92024

William Pearse 6960 Peach Tree Road Carlsbad, CA 92011

James Peeler 3692 Herman Avenue San Diego, CA 92104

Kim Pendleton 242 Luiseno Avenue Oceanside, CA 92057

Mark Peterson 1804 Oxford Avenue Cardiff-by-the-Sea, CA 92007 Marc Phillips 2970 Racetrack View Drive Del Mar, CA 92014

Jennifer Pickering 645 Ida Avenue Solana Beach, CA 92075

Michael Pierce 518 Sweet Pea Place Encinitas, CA 92024

John F. Powell 7401 Magellan Street Carlsbad, CA 92011

Katherine Prelat 845 Nardo Road Encinitas, CA 92024

Diane Nygaard, President Preserve Calavera 5020 Nighthawk Way Oceanside, CA 92056

Carey Preston 953 Arden Drive Encinitas, CA 92024

Prevent Los Angeles Gridlock Usurping the Environment (PLAGUE) c/o Shute, Mihaly & Weinberger LLP Rachel B. Hooper, Attorney, Erin B. Chalmers & Laurel L. Impett, AICP, Urban Planner 396 Hayes Street San Francisco, CA 94102

Morteza M. Rahimi, 1507 Santa Sabina Court Solana Beach, CA 92075

Jeff Ramsay 386 Carmel Creeper Place Encinitas, CA 92024

Jim Hare, Planning Director Rancho Santa Fe Association P.O. Box A Rancho Santa Fe, CA 92067-0359

^{*} Received a hard copy of the Executive Summary.



Peter Smith, Manager Rancho Santa Fe Association P.O. Box A Rancho Santa Fe, CA 92067-0359

Ben Redman 645 Ocean View Encinitas. CA 92024

Charlotte Reed 259 Mangano Circle Encinitas, CA 92024

Leslie Reed 3972 Ambervale Terrace San Diego, CA 92130

Leslie Reed 818 Ida Avenue (rental property) Solana Beach, CA 92075

Catherine Reilly 172 N. Columbus Street Arlington, VA 22203-2617

Resident 6914 Waters End Drive Carlsbad, CA 92011

Mike and Dee Rich 12912 Long Boat Way Del Mar, CA 92014

Charles D. Richmond 2537 Via Pisa Del Mar, CA 92014

Paul Riha 3546 Highland Drive Carlsbad, CA 92008

Edwin Riley 1480 Calico Lane Escondido, CA 92029

Marilyn Rivas 2783 Caminito San Marino Del Mar, CA 92014 Marilyn Rivas 733 Dover Court San Diego, CA 92109

Janet Robinson 772 Corinia Court Encinitas, CA 92024

Don Rodmel 895 Genevieve Street Solana Beach, CA 92075

Chuck Rogers 2305 Pio Pico Drive Carlsbad, CA 92008

Sharon Clay Rose 412 Marview Drive Solana Beach, CA 92075

Karina L. Ross Di Stasio 358 Carmel Creeper Place Encinitas, CA 92024

Mark F. Rubins, Sr., DC 3983 Packard Lane Carlsbad, CA 92008

Elizabeth Rudee 1345 Caminito Acento La Jolla, CA 92037

Karl Rudnick 1019 San Patricio Drive Solana Beach, CA 92075

Jerry Rugg 301 Mission Avenue, Unit 305 Oceanside, CA 92054

Patrick Russell 652 Poinsettia Park South Encinitas, CA 92024

Paula and Tim Ryan 612 Santa Helena Solana Beach, CA 92075

^{*} Received a hard copy of the Executive Summary.



Father William Rowland, CJM Saint Patrick Catholic Community Church 3821 Adams Street Carlsbad, CA 92008

Lynn Salsberg, R.N. 264 La Barranca Drive Solana Beach, CA 92075

Cindy Stankowski, Director San Diego Archaeological Center 16666 San Pasqual Valley Road Escondido, CA 92027-7001

Harold G. Thompson, Conservation Volunteer San Diego Audubon Society 4010 Morena Boulevard, Suite 100 San Diego, CA 92117

James A. Peugh, Conservation Committee Chair San Diego Audubon Society 4010 Morena Boulevard, Suite 100 San Diego, CA 92117

Andy Hanshaw, Executive Director San Diego County Bicycle coalition P.O. Box 34544 San Diego, CA 92163

Gabriel Solmer, Director Environmental Law and Policy Clinic San Diego Coastkeeper 2825 Dewey Road, Suite 200 San Diego, CA 92106

James W. Royle, Jr., Chairperson Environmental Review Committee San Diego County Archaeological Society P.O. Box 81106 San Diego, CA 92138-1106

Andy Hanshaw, Executive Director San Diego County Bicycle Coalition P.O. Box 34544 San Diego, CA 92163 Paul Lanspery, Deputy General Manager San Diego County Water Authority 4677 Overland Avenue San Diego, CA 92123

Edalia Olivo-Gomez
Environmental Specialist
San Diego Gas & Electric
8315 Century Park Court, CP21E
San Diego, CA 92123

Debra L. Reed, President San Diego Gas & Electric 8330 Century Park Court San Diego, CA 92123

Jim Seifert, Manager of Corporate Real Estate Land Services & Facilities On behalf of San Diego Gas & Electric 8335 Century Park Court San Diego, CA 92123

San Diego Gas & Electric Planning and Land Use P.O. Box 1831 San Diego, CA 92112

San Diego Metropolitan Transit System 1255 Imperial Avenue San Diego, CA 92101

Tom Deméré, Ph.D. San Diego Natural History Museum P.O. Box 121390 San Diego, CA 92112-1390

Attn. EIR Review
San Diego Regional Chamber of Commerce
402 West Broadway, Suite 1000
San Diego, CA 92101

Jerry Sanders, President & CEO San Diego Regional Chamber of Commerce Emerald Plaza 402 West Broadway, Suite 1000 San Diego, CA 92101-3585

^{*} Received a hard copy of the Executive Summary.



Dawn Rawls, Chair The San Dieguito Lagoon Committee 1087 Klish Way Del Mar, CA 92014

Board of Directors
San Dieguito River Park Joint Powers
Authority
18372 Sycamore Creek Road
Escondido, CA 92025

Dick Bobertz, Executive Director San Dieguito River Valley Regional Open Space Park 18372 Sycamore Creek Road Escondido, CA 92025

Olga Diaz JPA Board Chair and Escondido City Council Deputy Mayor San Dieguito River Valley Regional Open Space Park 18372 Sycamore Creek Road Escondido, CA 92025

Larry Watt, Director San Dieguito Water District 505 South Vulcan Avenue Encinitas, CA 92024

Julie Sanderson 1036 Orpheus Avenue Leucadia, CA 92024

Scott Sandoval 2928 33rd Street San Diego, CA 92104

Fred C. Sandquist 6408 Crossbill Court Carlsbad, CA 92011-2783

Adam Hoch, Associate Engineer San Elijo Joint Powers Authority 2695 Manchester Avenue Cardiff-by-the-Sea, CA 92007 Michael T. Thornton, P.E., General Manager San Elijo Joint Powers Authority P.O. Box 1077 Cardiff-by-the-Sea, CA 92007-7077

Doug Gibson, Executive Director/Principal Scientist San Elijo Lagoon Conservancy P.O. Box 230634 Encinitas, CA 92023

Denise Stillinger, President of the Board San Elijo Lagoon Conservancy P.O. Box 230634 Encinitas, CA 92023

Lana Saner 704 Stratford Drive Encinitas. CA 92024

Neville E. Saner 704 Stratford Drive Encinitas, CA 92024

Don Sanford 696 Poinsettia Park S. Encinitas, CA 92024

Michael J. Bardin, General Manager Santa Fe Irrigation District P.O. Box 409 Rancho Santa Fe, CA 92067

Sep Sarshar 2460 Oxford Avenue Cardiff-by-the-Sea, CA 92007

Duncan McFetridge Save Our Forest and Ranchlands P.O. Box 475 Descanso, CA 91916

Attn. EIR Review Save Our Heritage Organisation 2476 San Diego Avenue San Diego, CA 92110-2838

^{*} Received a hard copy of the Executive Summary.



Renee Savigliano Renee Savigliano International Dynamics, LLC 2557 Via Merano Del Mar, CA 92014

John Schad 621 Sweet Pea Place Encinitas, CA 92024

Robert E. Schell 14909 El Camino Real Del Mar, CA 92014

Deb Schmidt 620 W. Solana Circle # 3A Solana Beach, CA 92075

Marie B. Schmitz 7980 Pat Street La Mesa, CA 91942-2548

Bruce J. Schryver 803 Spindrift Lane Carlsbad, CA 92011

Ken Schultz 1870 Wilsone Avenue Leucadia, CA 92024

Nadine Scott 550 Hoover Street Oceanside, CA 92054

John A. Economides, P.E., Facilities Team Chair Seacoast Community Church 1050 Regal Road Encinitas, CA 92024

James D. Lang, President Sea Cliff Homeowners Association 6126 Innovation Way Carlsbad, CA 92009-1728

Carole Serling 2039 Bruceala Court Cardiff-by-the-Sea, CA 92007 Susan Sesnovich 349 Carmel Creeper Place Encinitas, CA 92024

Matt Shakter 7121 Rockrose Terrace Carlsbad, CA 92011

Jan Hudson Shaw Ridge Homeowners Association 5121 Shaw Ridge Road San Diego, CA 92130

Mrs. David Sherwood 1526 Hunsaker Street Oceanside, CA 92054

Pam Shetler 6981 Whitecap Drive Carlsbad, CA 92011

Beverly Shone 550 Gardena Court Encinitas, CA 92024

Elizabeth Shopes 14104 Bahama Cove Del Mar, CA 92014

Document Review Committee Sierra Club, San Diego Chapter 8304 Clairemont Mesa Boulevard, Ste. 101 San Diego, CA 92111

Nilmini Silva-Send 5998 Alcala Park San Diego, CA 92110-2492

Jacqueline Simon 802 Caminito del Sol Carlsbad, CA 92011-2405

Ray Simon 225 Brooks Street Oceanside, CA 92054

^{*} Received a hard copy of the Executive Summary.



Jim O'Neal, President of the Board of Directors Skyloft Homeowners Protective Corporation c/o J.D. Richardson Company 2355 Northside Drive San Diego, CA 92108

Belinda Smith 8540 5th Avenue San Diego, CA 92103

Janis Smith 510 Sweet Pea Place Encinitas, CA 92024

Susan E. Smith Seiurus Biological Consulting 13716 Ruette le Parc, Unit E Del Mar, CA 92014

Gerald Sodomka 105 Mozart Avenue Cardiff-by-the-Sea, CA 92007-2314

Sharon Garrow, President Solana Beach Chamber of Commerce 210 West Plaza P.O. Box 623 Solana Beach, CA 92075

Carlos Soledade 521 Gardena Court Encinitas, CA 92024

Kirsten Soledade 521 Gardena Court Encinitas, CA 92024

Marty Sommercamp 1016 Santa Florencia Solana Beach, CA 92075

Steven Soto 1309 Bush Street Oceanside, CA 92058

Southern California Edison P.O. Box 800 Rosemead, CA 91770 Tracey Alsobrook, Project Manager San Dieguito Wetlands Restoration Project Southern California Edison P.O. Box 800 Rosemead, CA 91770

Patrick Tennant, Project Manager San Dieguito Wetlands Restoration Project Southern California Edison P.O. Box 800 Rosemead, CA 91770

Melissa Spiegler 669 Stratford Drive Encinitas, CA 92024

Robert Spiegler 669 Stratford Drive Encinitas, CA 92024

Byron Spratt 353 Carmel Creeper Place Encinitas, CA 92024

Joan Stabenau 7426 Lantana Terrace Carlsbad, CA 92011

Diane Stacey 576 Stratford Drive Encinitas, CA 92024

Marcia Stanley 4039 Carmel View Road, No. 99 San Diego, CA 92130

Tom and Lahrisa Steenback 501 San Luis Rey Drive Oceanside, CA 92058

Tom Stekmann 5239 El Arbol Carlsbad, CA 92008

Pat Steward 12921 Caminito Del Canto Del Mar, CA 92014

^{*} Received a hard copy of the Executive Summary.



James Stiven 1109 Lagoon View Court Cardiff-by-the-Sea, CA 92007

Kathleen Stiven 1109 Lagoon View Court Cardiff-by-the-Sea, CA 92007

Jordan Stockham 1417 Priaeus Street Encinitas, CA 92024

Frank Sullivan 1277 Santa Luisa Drive Solana Beach, CA 92075

Executive Committee Surfrider Foundation San Diego County Chapter P.O. Box 1511 Solana Beach, CA 92075

Mrs. R. Sutherland 1474 Stewart Street Oceanside, CA 92054

Frank Sutton 1078 Neptune Encinitas, CA 92024

Bill Swinnea 1944 Playa Riviera Drive Cardiff-by-the-Sea, CA 92007

Donna Szydelko 13050 Caminito Cristobal Del Mar, CA 92014

Ross Tanner 13851 Mercado Drive Del Mar, CA 92014

Laura Tarabini 221 Mangano Circle Encinitas, CA 92024

Reed Thompson UBS Financial Services, Inc. 1200 Prospect Street, Suite 500 La Jolla, CA 92037 Greg Thomsen 7155 Linden Terrace Carlsbad, CA 92011

Brooke Tigh 438 Carmel Creeper Place Encinitas, CA 92024

Cynthia Tigh 438 Carmel Creeper Place Encinitas, CA 92024

Kamei Tolba, M.D., FAPP 398 Carmel Creeper Place Encinitas, CA 92024

Torrey Pines Association P.O. Box 345 La Jolla, CA 92038

Dennis Ridz, Chair Torrey Pines Community Planning Board 14151 Boquita Drive Del Mar, CA 92014

David Schonbrunn, President Transportation Solutions Defense and Education Fund P.O. Box 151439 San Rafael, CA 94915

Sumukh Trilokekar 8775 Costa Verde Boulevard, # 1108 San Diego, CA 92122

Lynne Truong 1045 Santa Queta Solana Beach, CA 92075

Daniel Turitto 1522 Old Creek Court Cardiff-by-the-Sea, CA 92007

Sarah Turitto 1522 Old Creek Court Cardiff-by-the-Sea, CA 92007

^{*} Received a hard copy of the Executive Summary.



Jeff Turnbull 550 Gardena Court Encinitas, CA 92024

Charlotte Ulm 249 Pacific View Lane Encinitas, CA 92024

Robert Uzes 3580 Vista Laguna Road Fallbrook, CA 92028

Mary Vartanian 325 W. Orange Grove Avenue Sierra Madre, CA 91024

Edgar Vasquez 529 Sweet Pea Place Encinitas. CA 92024

Dana Vieweg 457 Union Street Encinitas, CA 92024

Humberto Viveros 1566 Caudor Street Encinitas, CA 92024

Karen von Dessonneck 1165 Eolus Avenue Encinitas, CA 92024

James W. Waldorf, Inc. Real Estate Appraisal and Consulting 5431 Avenida Encinas, Suite H Carlsbad, CA 92008

Pat Wallace 1901 Bush Street, No. 101 Oceanside, CA 92058

Richard F. Walsh 907 Caminito Estrada Unit B Carlsbad, CA 92011

Molly Wardell 630 Barbara Avenue Solana Beach, CA 92075 Evelyn Weidner 537 Ocean View Encinitas, CA 92024

Felicia Weinbaum, MBA 12991 Longboat Way Del Mar, CA 92014

Tracy Weiss 630 Barbara Solana Beach, CA 92075

Leslie Welsh 1814 MacKinnon Avenue Cardiff-by-the-Sea, CA 92007

Dolores Welty 2076 Sheridan Road Encinitas, CA 92024

Judy Wegenauer 431 Glenmont Drive Solana Beach, CA 92075

The Western Family 510-514 La Costa Avenue Encinitas, CA 92024

Judith Weston 1644 Legays Drive Cardiff-by-the-Sea, CA 92007

Paul Whitworth 6965 Waters End Drive Carlsbad, CA 92011

Cliff Whynaught 1250 Kirmar Place Oceanside, CA 92054

Karen Whynaught 1250 Kirmar Place Oceanside, CA 92054

Virginia Wilken 447 Carmel Creeper Place Encinitas, CA 92024

^{*} Received a hard copy of the Executive Summary.



Interested Companies, Organizations, Citizens and Community Planning Groups (cont.)

Wendy Wilkens 2842 Cape Sebastian Cardiff-by-the-Sea, CA 92007

Claudia E. Wilson 123 Buena Ventura Court Solana Beach, CA 92075

Mary Wilson 1441 Moreno Street Oceanside, CA 92054

Diane E. Wintriss 3707 Ruette de Ville San Diego, CA 92130

Chuck Wise 1820 Amalfi Drive Leucadia, CA 92024

Mark Wisniewski 2036 Countrywood Way Encinitas, CA 92024

Mary Witesman 695 Normandy Road Encinitas, CA 92024

John Wolfe 802 Santa Hidalga Solana Beach, CA 92075 James Wong 1309 Windsor Road Cardiff-by-the-Sea, CA 92007

Darren Woolcott 13122 Caminito Pointe Del Mar, CA 92014

Linda M. Woolcott 13122 Caminito Pointe Del Mar Del Mar, CA 92014

Susan Yamata 804 Avenida de San Clemente Encinitas, CA 92024

Ronette Youmans 607 Orpheus Avenue Encinitas, CA 92024

Peter Zahn Counsel, District Law Offices 2163 Newcastle Avenue, Suite 200 Cardiff, CA 92007

Carol Zukowski 5081 Caspian Drive Oceanside, CA 92057

^{*} Received a hard copy of the Executive Summary.







Appendix A: Resources Evaluated Relative to the Requirements of Section 4(f) and *De Minimis*Determinations for the I-5 North Coast Corridor Project San Diego, California

October 2009 Revised September 2013





TABLE OF CONTENTS

<u>Section</u> <u>Pag</u>	ge
CHAPTER 1.0 – INTRODUCTIONA	۱-5
CHAPTER 2.0 – PROJECT DESCRIPTION	11
CHAPTER 3.0 – DISCUSSION OF PROPERTIES	17
CHAPTER 4.0 – SECTION 4(f) RESOURCES FOR DE MINIMIS FINDING A-5 4.1 San Elijo Lagoon Ecological Reserve A-5 4.1.1 Impacts A-6 4.1.2 No Build Alternative A-7 4.1.3 Measures to Minimize Harm A-7 4.1.4 De Minimis Finding A-7 4.1.5 Coordination A-7 4.2 Agua Hedionda Lagoon A-7 4.2.1 Impacts A-7 4.2.2 No Build Alternative A-7 4.2.3 Measures to Minimize Harm A-7 4.2.4 De Minimis Finding A-7 4.3 Historic Properties A-7 4.3 Avoidance Alternatives A-7 4.3 Avoidance Finding A-7 4.3 Avoidance Finding A-7 4.3 Avoidance Finding A-7 4.3 Avoidance Finding<	59 60 71 71 71 72 76 77 77 77 78 78
CHAPTER 5.0 – REFERENCES	81

APPENDIX

<u>Letter</u>

A1 Correspondence and Concurrence with Agencies of Jurisdiction

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
Figure 1: Regional Map	A-7
Figure 2: Section 4(f) Properties - I-5 North Coast Corridor - Southern Portion	
Figure 3: Section 4(f) Properties - I-5 North Coast Corridor - Northern Portion	
Figure 4: Torrey Pines State Reserve	
Figure 5: Coastal Area of the San Dieguito River Park	A-27
Figure 6: Potential Impacts to the Coastal Area of the San Dieguito River Park	
Figure 7: Potential Impacts to the San Dieguito River Park	A-29
Figure 8: Hall Property Community Park	A-35
Figure 9: Batiquitos Lagoon	A-41
Figure 10: Holiday Park	A-47
Figure 11a: Holiday Park in Carlsbad: Existing View Looking North	A-49
Figure 11b: Holiday Park in Carlsbad: Proposed View Looking North	
Figure 11c: Holiday Park in Carlsbad: Existing View Looking Southwest	A-50
Figure 11d: Holiday Park in Carlsbad: Proposed View Looking Southwest	A-50
Figure 12: Buena Vista Lagoon	
Figure 13: San Elijo Lagoon Ecological Reserve	
Figure 14: Potential Impacts to the San Elijo Lagoon Ecological Reserve	A-65
Figure 15: Preferred Alternative Cross Section Locations at San Elijo Lagoon	
Ecological Reserve	
Figure 16: Preferred Alternative Cross Section at Sta. 622 + 40	
Figure 17: Preferred Alternative Cross Section at Sta. 623 + 00	
Figure 18: Preferred Alternative Cross Section at Sta. 623 + 50	
Figure 19: Agua Hedionda Lagoon	
Figure 20: Potential Impacts to Agua Hedionda Lagoon	A-74
LIST OF TABLES	
<u>Table</u>	<u>Page</u>
Table 1: Potential Section 4(f) Resources and Distance from <i>I-5 NCC Project</i>	A-16
Table 2: Resources Not Protected by Section 4(f) and Type	
Table 3: Section 4(f) Resources and Type	
Table 4: Area of 4(f) Use for the San Elijo Lagoon Ecological Reserve by Alternative.	
Table 5: Area of 4(f) Use for Agua Hedionda Lagoon by Alternative	A-72



CHAPTER 1.0 – INTRODUCTION

The following discusses existing and planned properties adjacent to the proposed Interstate 5 North Coast Corridor Project (*I-5 NCC Project* or proposed project) that may warrant protection under Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966. The discussion is prepared in support of the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the proposed project. Figure 1 shows the proposed project's regional location. Figures 2 and 3 show the locations of the potential 4(f) resources evaluated in this document.

Section 4(f) of the USDOT Act of 1966, codified in federal law as 49 U.S.C. 303, declares that "[it] is the policy of the United Sates Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that "the Secretary [of Transportation] may approve a transportation program or project...requiring the use of any publicly owned land from a public park, recreation area, wildlife and waterfowl refuge of national, State or local significance, or land of an historic site of national, State, or local significance (as determined by the federal, State or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from such use; or
- Consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on a Section 4(f) property.

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Department of Agriculture and the Department of Housing and Urban Development in developing transportation projects and programs that use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer (SHPO) is also needed.

This Appendix is organized into five chapters: Chapter 1 addresses regulatory language, Chapter 2 offers a brief project description of each build alternative, Chapter 3 identifies all potential Section 4(f) resources within a half-mile radius of the project and analyzes the resources afforded protection under Section 4(f) that are not directly used, Chapter 4 is a *de minimis* impact analysis for two parks and one historic resource, and Chapter 5 identifies references.







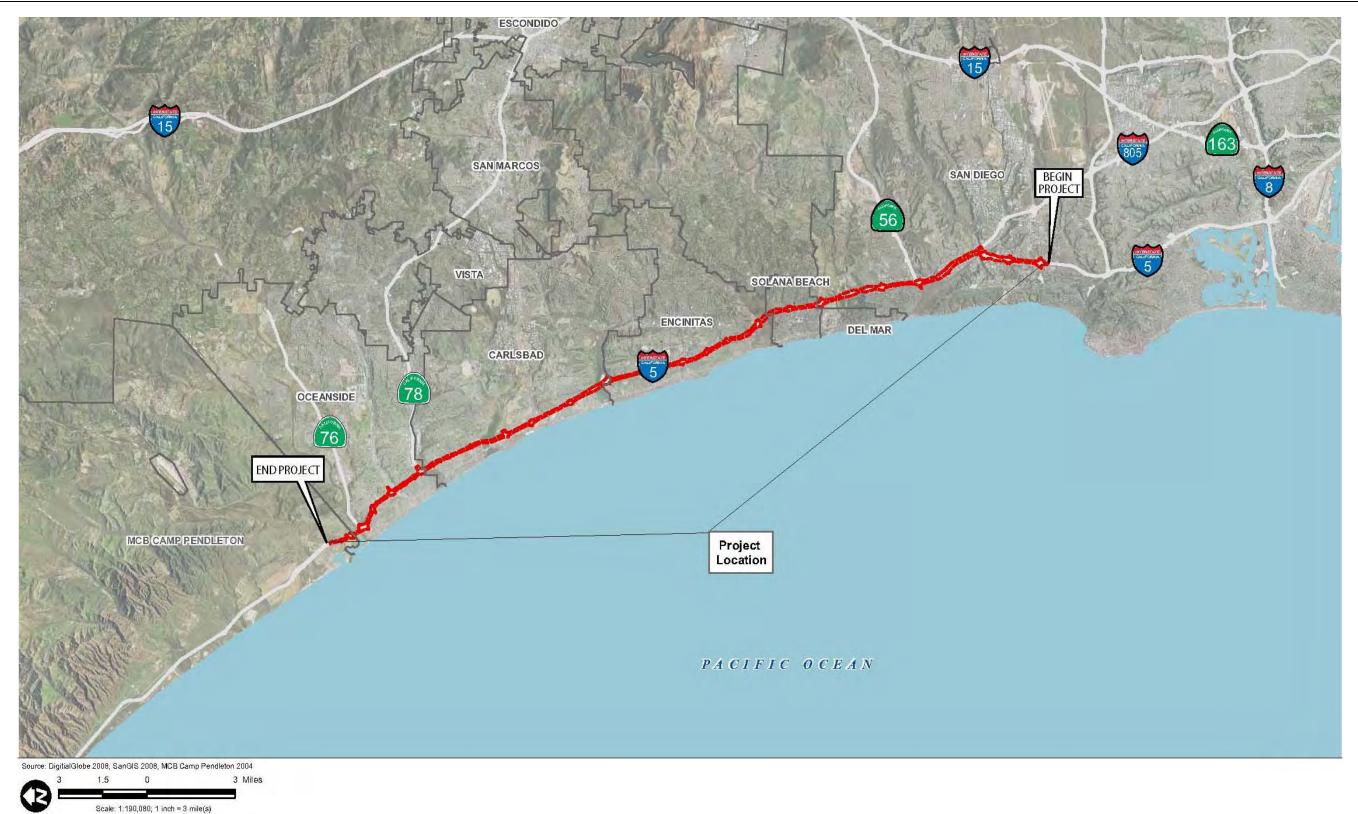


Figure 1: Regional Map



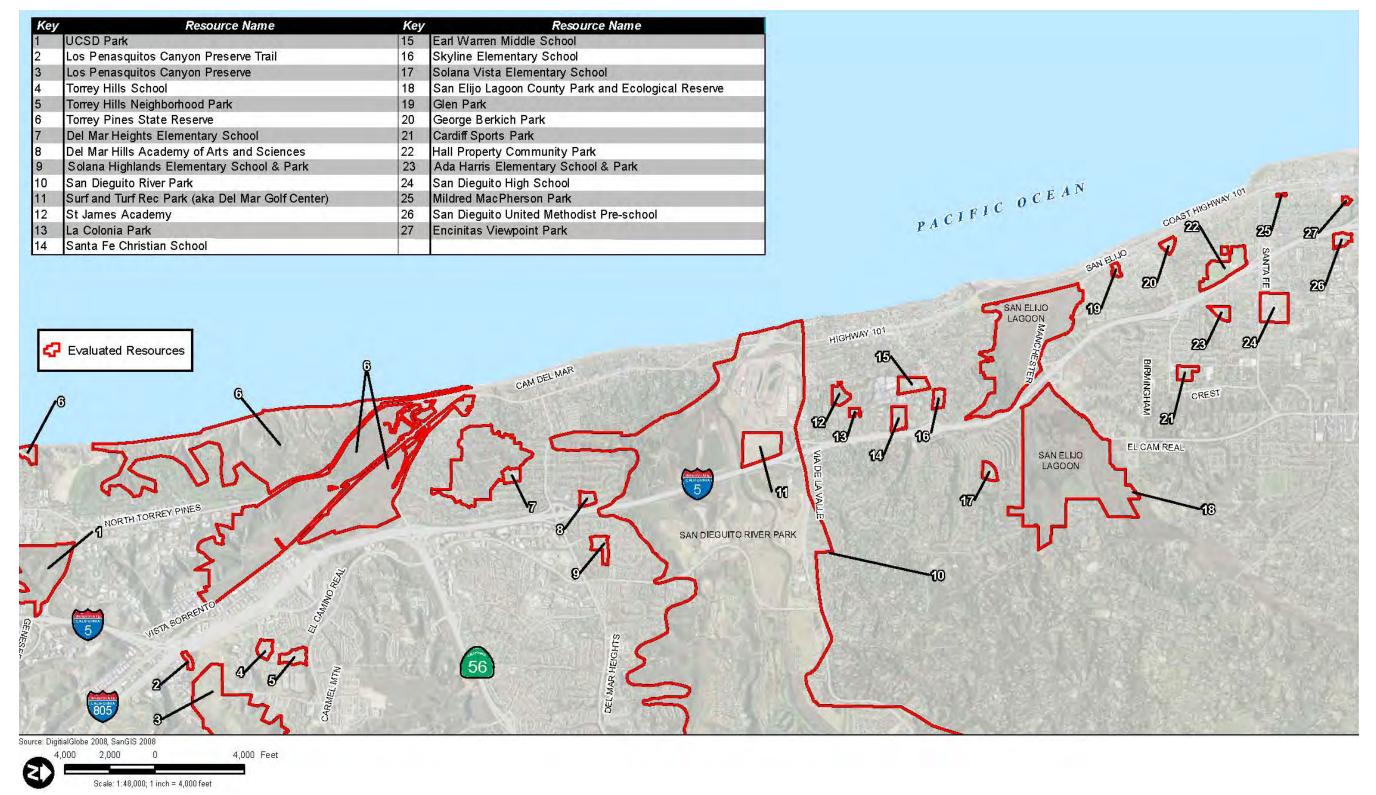


Figure 2: Section 4(f) Properties - I-5 North Coast Corridor – Southern Portion



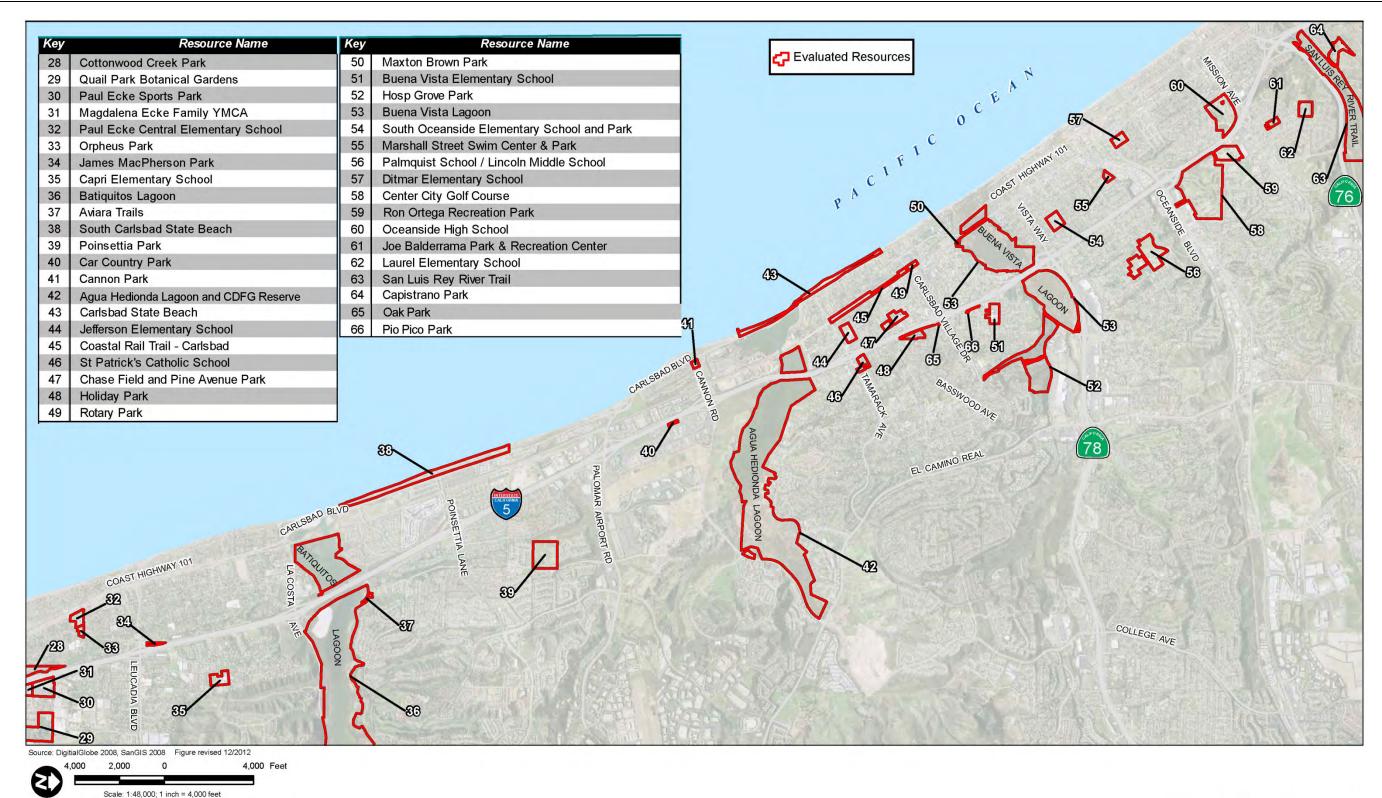


Figure 3: Section 4(f) Properties - I-5 North Coast Corridor – Northern Portion







CHAPTER 2.0 – PROJECT DESCRIPTION

Four build alternatives and one no-build alternative are under consideration for the *I-5 NCC Project* that meet the purpose and need. The main purpose is to maintain or improve the existing and future traffic operations in the *I-5* North Coast Corridor in order to improve the safe and efficient regional movement of people and goods for the design year 2035. The need arises from the traffic demand of the corridor (See *Chapter 1, Proposed Project*). These alternatives are briefly described as follows. Please refer to *Chapter 2, Project Alternatives*, of the EIR/EIS for a detailed description of the project alternatives:

The circulation of the Draft EIR/EIS included the statement: "Per requirements of 49 U.S.C. 303: Section 4(f) of the Department of Transportation Act of 1966, as amended, the public is hereby informed of its intent to make a *de minimis* impact finding for eligible properties, as the project will not adversely affect the activities, features, or attributes qualifying the properties for Section 4(f) protection.

Following circulation of the Draft EIR/EIS and receipt of comments, the 8+4 Buffer alternative, which has the smallest footprint of the build alternatives, was refined. The refined 8+4 Buffer alternative was determined to be the locally preferred alternative (LPA) in 2011 and was further analyzed in the August 2012 Supplemental Draft EIR/EIS. That document provided information about a number of topics for which information was not available prior to circulation of the Draft EIR/EIS, as well as clarification of project design based on continued engineering refinement since 2010.

After circulation of the Draft Supplemental EIR/EIS, project planning continued, including extensive coordination between resource agencies and FHWA and Caltrans regarding potential project impacts and appropriate project minimization and mitigation. The refined 8+4 Buffer alternative is now also identified as the Preferred Alternative, following completion of the Clean Water Act Section 404(b)(1) analysis to ensure that this alternative is in fact the Least Environmentally Damaging Practicable Alternative (LEDPA). The Preferred Alternative is also described in this Final EIR/EIS as the refined 8+4 Buffer alternative.

Preferred Alternative

Refined 8+4 Buffer Alternative

- The refined 8+4 Buffer alternative would construct one High Occupancy Vehicle (HOV)/Managed Lane in each direction from La Jolla Village Drive to just north of Lomas Santa Fe Drive.
- To provide a continuous HOV lane through the I-5 / I-805 junction, a freeway-to-freeway connector (flyover) would be constructed, crossing over the I-5 / I-805 merge, to connect the proposed HOV/Managed Lanes beginning at Voigt Drive to the existing HOV lanes that begin just north of the I-5 / I-805 junction.
- Two HOV/Managed Lanes would be constructed in each direction from just north of Lomas Santa Fe Drive to Harbor Drive/Vandegrift Boulevard.
- From near La Jolla Village Drive to near Harbor Drive/Vandegrift Boulevard, painted stripes of variable widths (up to five feet) would serve as a buffer, separating HOV/Managed Lanes from general purpose lanes.



- Direct Access Ramps (DARs) would provide new freeway access for HOV/Managed Lanes users at Voigt Drive and Manchester Avenue from grade-separated interchanges into Managed Lanes, thereby allowing direct access to the HOV/Managed Lanes without weaving across general-purpose lanes. The DARs are compatible with carpools, bus transit, and value pricing and would support HOV/Managed Lanes. Both of these facilities have also been redesigned since circulation of the Draft EIR/EIS to minimize environmental impacts.
- One general purpose lane would be constructed in each direction on I-5 from just south of Del Mar Heights Road to State Route (SR)-78.
- Intermediate access points (IAPs) or at-grade access would be located near Carmel Mountain Road, Del Mar Heights Road-Via de la Valle, Lomas Santa Fe Drive, Santa Fe Drive, Poinsettia Lane, Tamarack Avenue, and Oceanside Boulevard; as well as access points at the ends of HOV/Managed Lanes at La Jolla Village Drive and Harbor Drive.
- Intelligent Transportation System (ITS) components, such as toll collection equipment
 would be provided to allow SOV users to purchase use of HOV/Managed Lanes
 (including overhead suspended scanner devices such as gantries, traffic monitoring
 stations, ramp meters, closed circuit television [CCTV] to view traffic on the facility and to
 help manage the traffic, changeable message signs [CMSs] to display the tolls, and loop
 detectors to measure traffic volume and speed).
- Twelve-foot-wide auxiliary, acceleration, and deceleration lanes would be provided (as needed in 14 locations; 5 southbound, 4 northbound and 5 both north- and southbound) and 10- to 12-foot-wide shoulders.
- New park and ride facilities at Manchester Avenue and SR-76, and enhanced park and ride facilities at other locations would be constructed.
- Reconfiguration of various local interchanges would occur to improve vehicular, pedestrian and bicycle circulation at northbound ramps for Leucadia Boulevard and La Costa Avenue; at southbound ramps for Roselle Street, Manchester Avenue, Encinitas Boulevard, Palomar Airport Road and Oceanside Boulevard; and at both north-and southbound ramps at Genesee Avenue, Del Mar Heights Road, Via de la Valle, Birmingham Drive, Santa Fe Drive, Tamarack Drive, Carlsbad Village Drive, Mission Avenue, SR-76, and Harbor Drive, as detailed on Table 2.1 of the EIR/EIS.
- Redesign of lagoon bridges would occur at Peñasquitos, San Dieguito, San Elijo, Batiquitos, Agua Hedionda, and Buena Vista Lagoons, with a minimum width of 194 feet (97 feet on either side of centerline).
- Ramp metering would be implemented at various on-ramps (with ultimate metering at all 58 on-ramps at buildout), retaining walls (to reduce property acquisition needs, stabilize slopes, minimize impacts and accommodate engineered structures), barriers, guard rails/end treatments, crash cushions, bridge rails, and signage, installed as appropriate and as needed.
- Project-related drainage abandonment or improvement including extension, replacement or lining, with new drainage facilities constructed adjacent to cross roads (facility examples include storm drain inlets, storm ditches, rock slope protection, and headwalls).
- Existing overhead or underground utilities (water, sewer, gas, electricity telephone, and other communications) would be relocated as needed and within existing utility easements, as possible.
- Proposed sound barriers would be constructed as described in the EIR/EIS with specifics dependent on final design.



Other Build Alternatives

10+4 Barrier Alternative

The 10+4 Barrier alternative has similar features to the 8+4 Buffer alternative but adds a general purpose lane from Del Mar Heights Road to SR-78; and HOV/Managed Lanes would be separated from the general-purpose lanes by a concrete barrier. Standard shoulder widths of 10 ft would be provided on either side of the barrier.

10+4 Buffer Alternative

The 10+4 Buffer alternative would function similarly to the 8+4 Buffer alternative but would add a general purpose lane from Del Mar Heights Road to SR-78.

8+4 Barrier Alternative

The 8+4 Barrier alternative has similar features to the 8+4 Buffer alternative except that a concrete barrier with standard shoulder widths of 10 ft on either side would separate the HOV/Managed lanes from the general-purpose lanes from Del Mar Heights Road to SR-78.

No Build Alternative

The No Build alternative would not use any resources subject to Section 4(f).

Coordination

This project has been developed in coordination with various federal, State, regional, and local agencies. FHWA is the lead agency for the National Environmental Policy Act (NEPA) and the California Department of Transportation (Caltrans) is the lead agency for the California Environmental Quality Act (CEQA). In support of the EIR/EIS, these *de minimis* determinations were prepared in consultation with the agencies having jurisdiction over the resources and centered on a.) significance of the property, b.) primary purpose of the land, c.) proposed use and impacts, and d.) proposed measures to avoid and/or minimize harm.

Multiple meetings were held after release of the Draft EIR/EIS for public review. In 2010, five public hearings were held in the open-house format to present details about the proposed project design, including the impacts to Section 4(f) resources, the alternatives being considered, and findings from the environmental studies, as identified in the Draft EIR/EIS prepared for the project. The hearings were held on the following dates and locations:

- July 27, 2010 at the Encinitas Community and Senior Center in Encinitas
- August 3, 2010 at the Westfield University Town Center Forum Hall in San Diego
- August 17, 2010 at the Faraday Center in Carlsbad
- August 24, 2010 at Skyline Elementary School in Solana Beach
- September 9, 2010 at the Oceanside High School Multipurpose Room in Oceanside

Outreach to multiple stakeholders has continued to the present, as documented in *Chapter 5, Comments and Coordination* of this Final EIR/EIS. Recent meetings with stakeholders who have authority related to Section 4(f) properties evaluated herein include three meetings in 2012 with San Dieguito River Park and JPA representatives and staff and a meeting on March 28, 2013; one meeting in 2012 with San Elijo Lagoon Conservancy staff and a meeting on April 3, 2013; and one meeting in 2012 with the City of Carlsbad for Agua Hedionda Lagoon and a meeting on February 12, 2013. Subsequent correspondence occurred, resulting in concurrence with the Section 4(f) determination as noted in this document.







CHAPTER 3.0 – DISCUSSION OF PROPERTIES

To create a comprehensive list of resources that could potentially be subject to analysis under Section 4(f), Google Earth aerials were viewed and field reviews were conducted to identify potential resources. The list was cross-checked with the General Plan Recreation Elements and parks and recreation websites of the cities in which the resources are located. All potential Section 4(f) resources within one half-mile of the *I-5 NCC Project* are tabulated below. This chapter discusses parks, recreational facilities, wildlife refuges and historic properties found within or adjacent to the project area for 1) public ownership, 2) public access, 3) eligible historic properties, 4) permanent use of the resource and analysis of the use, and 5) analysis of proximity impacts.

From this analysis, the following list was developed. The locations of each property are shown in Figures 2 and 3. After assembly of this list, the properties were researched to determine if they met the criteria for eligibility as Section 4(f) properties. The remaining properties were inspected to confirm their location with respect to the proposed project and to inventory the attributes of each property. In certain cases the actual property was found to be outside the half-mile limit of the study area. Therefore, the properties outside the half-mile limit of the study area were deleted from the textual analysis.

Table 1: Potential Section 4(f) Resources and Distance from I-5 NCC Project

Map ID	Resource	City	Dist (mi) to I-5
1	UCSD Park	San Diego	0.10
2	Los Peñasquitos Canyon Reserve Trail	San Diego	0.01
3	Los Peñasquitos Canyon Preserve	San Diego	0.17
4	Torrey Hills School	San Diego	0.25
5	Torrey Hills Neighborhood Park	San Diego	0.40
6	Torrey Pines State Reserve	San Diego	0.17
7	Del Mar Heights Elementary School	San Diego	0.36
8	Del Mar Hills Academy of Arts and Sciences	San Diego	0.24
9	Solana Highlands Elementary School & Park	San Diego	0.22
10	San Dieguito River Park and Coast to Crest Trail	San Diego	0.00
11	Surf and Turf Recreation Park (aka Del Mar Golf Center)	San Diego	0.01
12	St James Academy	San Diego	0.05
13	La Colonia Park	Solana Beach	0.21
14	Santa Fe Christian School	Solana Beach	0.12
15	Earl Warren Middle School	Solana Beach	0.34
16	Skyline Elementary School	Solana Beach	0.18
17	Solana Vista Elementary School	Solana Beach	0.33
18	San Elijo Lagoon County Park and Ecological Reserve	Solana Beach & Encinitas	0.00
19	Glen Park	Encinitas	0.37
20	George Berkich Park	Encinitas	0.48
21	Cardiff Sports Park	Encinitas	0.44
22	Hall Property Community Park	Encinitas	0.00
23	Ada Harris Elementary School & Park	Encinitas	0.14
24	San Dieguito High School	Encinitas	0.28
25	Mildred MacPherson Park	Encinitas	0.40



Table 1 (cont.): Potential Section 4(f) Resources and Distance from I-5 NCC Project

Table 1	e 1 (cont.): Potential Section 4(f) Resources and Distance from I-5 NCC Project				
Map ID	Resource	City	Dist (mi) to I-5		
26	San Dieguito United Methodist Pre-school	Encinitas	0.11		
27	Encinitas Viewpoint Park	Encinitas	0.19		
28	Cottonwood Creek Park	Encinitas	0.47		
29	San Diego Botanical Gardens	Encinitas	0.30		
30	Paul Ecke Sports Park	Encinitas	0.00		
31	Magdalena Ecke Family YMCA	Encinitas	0.03		
32	Paul Ecke Central Elementary School	Encinitas	0.37		
33	Orpheus Park	Encinitas	0.24		
34	James MacPherson Park	Encinitas	0.01		
35	Capri Elementary School	Encinitas	0.38		
36	Batiquitos Lagoon	Carlsbad	0.00		
37	Aviara Trails	Carlsbad	0.15		
38	South Carlsbad State Beach	Carlsbad	0.33		
39	Poinsettia Park	Carlsbad	0.35		
41	Cannon Park	Carlsbad	0.35		
40	Car Country Park	Carlsbad	0.01		
42	Agua Hedionda Lagoon and CDFW Reserve	Carlsbad	0.00		
43	Carlsbad State Beach	Carlsbad	0.40		
43	Carlsbad State Beach	Carlsbad	0.40		
44	Jefferson Elementary School	Carlsbad	0.32		
45	Coastal Rail Trail - Carlsbad	Carlsbad	0.02		
46	St Patrick's Catholic School	Carlsbad	0.10		
47	Chase Field and Pine Avenue Park	Carlsbad	0.07		
48	Holiday Park	Carlsbad	0.00		
49	Rotary Park	Carlsbad	0.48		
50	Maxton Brown Park	Carlsbad	0.44		
51	Buena Vista Elementary School	Carlsbad	0.06		
52	Hosp Grove Park	Carlsbad	0.38		
53	Buena Vista Lagoon	Carlsbad & Oceanside	0.00		
54	South Oceanside Elementary School and Park	Oceanside	0.17		
55	Marshall Street Swim Center and Park	Oceanside	0.25		
56	Palmquist School / Lincoln Middle School	Oceanside	0.30		
57	Ditmar Elementary School	Oceanside	0.45		
58	Center City Golf Course	Oceanside	0.00		
59	Ron Ortega Recreation Park	Oceanside	0.02		
60	Oceanside High School	Oceanside	0.03		
61	Joe Balderrama Park & Center	Oceanside	0.15		
62	Laurel Elementary School	Oceanside	0.43		
63	San Luis Rey River Trail	Oceanside	0.00		
64	Capistrano Park	Oceanside	0.21		
65	Oak Park	Carlsbad	0.01		
66	Pio Pico Park	Carlsbad	0.01		



3.1 RESOURCES NOT PROTECTED BY SECTION 4(f)

The properties in Table 2 are not subject to the provisions of Section 4(f) because: 1) they are not a significant publicly owned recreation area, wildlife or waterfowl refuge or historic site listed or eligible for listing on the National Register of Historic Places, 2) they are not open to the public and/or 3) the project does not permanently use the property and does not hinder the preservation of the property.

Caltrans coordinated with the jurisdiction with authority over three recreational areas to determine if Section 4(f) were triggered. UCSD Park is not subject to Section 4(f) protections, with concurrence from UCSD stated in an email on August 31, 2010. Oak and Pio Pico Parks similarly are not subject to Section 4(f) protections, with concurrence from the City of Carlsbad stated in an email dated February 21, 2013.

Table 2: Resources Not Protected by Section 4(f) and Type

Map ID	Resource	City	Туре	Notes
1	UCSD Park ¹	San Diego	passive open space	not significant public recreation area per UCSD ¹
11	Surf and Turf Recreation Park (Del Mar Golf Center)	San Diego	golf and tennis	private
12	St James Academy	San Diego	playground and fields	private
14	Santa Fe Christian School	Solana Beach	playground and fields	private
26	San Dieguito United Methodist Pre-school	Encinitas	playground and fields	private
29	San Diego Botanical Gardens	Encinitas	gardens	private
31	Magdalena Ecke family YMCA	Encinitas	gym, pool, skate park, and indoor soccer fields	private
32	Paul Ecke Central Elementary School	Encinitas	playground and fields	closed to the public
34	James MacPherson Park	Encinitas	park	no access
35	Capri Elementary School	Encinitas	playground and fields	closed to the public
44	Jefferson Elementary School	Carlsbad	playground and fields	closed to the public
46	St Patrick's Catholic School	Carlsbad	playground and fields	private



Table 2 (cont.): Resources Not Protected by Section 4(f) and Type

Map ID	Resource	City	Туре	Notes
65	Oak Park ²	Carlsbad	picnic area	not significant public recreation area per City of Carlsbad ²
66	Pio Pico Park ²	Carlsbad	picnic area	not significant public recreation area per City of Carlsbad ²
62	Laurel Elementary School	Oceanside	playground and fields	closed to the public

^{1:} The UCSD Park lands are areas designated for open space, aesthetic, and habitat values. Per correspondence with UCSD, any recreational use is incidental. Therefore, these parks are not subject to Section 4(f).

3.2 SECTION 4(f) RESOURCES EVALUATED FOR PROXIMITY IMPACTS

All public and publicly accessed parks, recreational facilities, and wildlife refuges within approximately 0.5 mi of any of the project alternatives have been identified and considered. The attributes contributing to the Section 4(f) resources listed in Table 3 below have been inventoried and the effects of the project upon these attributes evaluated. It is not expected that the proposed project would result in a constructive use due the project's proximity to these resources. Each of these Section 4(f) resources is described in the text following Table 3, including size, activities, facilities, and characteristics. Chapter 4 discusses proximity impacts to San Elijo and Agua Hedionda Lagoons and historic structures.

Table 3: Section 4(f) Resources and Type

Map ID	Resource	City	Туре
2	Los Peñasquitos Canyon Reserve Trail	San Diego	trail
4	Torrey Hills School	San Diego	sports fields
3	Los Peñasquitos Canyon Preserve	San Diego	open space
5	Torrey Hills Neighborhood Park	San Diego	community park
6	Torrey Pines State Reserve	San Diego	open space
7	Del Mar Heights Elementary School	San Diego	playground and fields
8	Del Mar Hills Academy of Arts and Sciences	San Diego	playground and fields
9	Solana Highlands Elementary School & Park	San Diego	community park
10	San Dieguito River Park and Coast to Crest Trail	San Diego	regional park and trail
13	La Colonia Park	Solana Beach	community park
15	Earl Warren Middle School	Solana Beach	playground and fields
16	Skyline Elementary School	Solana Beach	playground and fields

^{2:} The Oak and Pio Pico Parks are defined as "Special Use Areas." within the City of Carlsbad General Plan under the Parks and Recreation section. The City of Carlsbad concurred that these parks do not have a significant recreational use and would not be subject to Section 4(f).



Table 3 (cont.): Section 4(f) Resources and Type

Map ID	Resource	City	Туре
17	Solana Vista Elementary School	Solana Beach	playground and fields
19	Glen Park	Encinitas	community park
20	George Berkich Park	Encinitas	community park
21	Cardiff Sports Park	Encinitas	sports fields
22	Hall Property Community Park	Encinitas	community park
23	Ada Harris Elementary School & Park	Encinitas	community park
24	San Dieguito High School	Encinitas	sports fields
25	Mildred MacPherson Park	Encinitas	community park
27	Encinitas Viewpoint Park	Encinitas	community park
28	Cottonwood Creek Park	Encinitas	community park
33	Orpheus Park	Encinitas	community park
36	Batiquitos Lagoon	Carlsbad	open space
37	Aviara Trails	Carlsbad	trail
38	South Carlsbad State Beach	Carlsbad	beach, open space
39	Poinsettia Park	Carlsbad	community park
40	Car Country Park	Carlsbad	community park
41	Cannon Park	Carlsbad	community park
43	Carlsbad State Beach	Carlsbad	beach, open space
45	Coastal Rail Trail - Carlsbad	Carlsbad	trail
47	Chase Field and Pine Avenue Park	Carlsbad	sports fields and community park
48	Holiday Park	Carlsbad	community park
49	Rotary Park	Carlsbad	community park
50	Maxton Brown Park	Carlsbad	passive recreation
51	Buena Vista Elementary School	Carlsbad	playground and fields
52	Hosp Grove Park	Carlsbad	community park
53	Buena Vista Lagoon	Carlsbad & Oceanside	open space
55	Marshall Street Swim Center and Park	Oceanside	community park
54	South Oceanside Elementary School and Park	Oceanside	community park
56	Palmquist School / Lincoln Middle School	Oceanside	playground and fields
57	Ditmar Elementary School	Oceanside	playground and fields
58	Center City Golf Course	Oceanside	golf course
59	Ron Ortega Recreation Park	Oceanside	sports fields
60	Oceanside High School	Oceanside	sports fields
61	Joe Balderrama Park & Center	Oceanside	community park
63	San Luis Rey River Trail	Oceanside	trail / bike path
64	Capistrano Park	Oceanside	community park



As documented in the Final EIR/EIS, bridges at San Elijo, Batiquitos, and Buena Vista lagoons would be lengthened within Caltrans right-of-way to accommodate the channel dimensions identified in the optimization studies. Lengthening of the bridges would remove roadbed fill, create more wetland, and enhance tidal and fluvial flows and water quality in these lagoons. The longer bridges at San Elijo and Buena Vista lagoons would also facilitate restoration plans for these lagoons.

Los Peñasquitos Canyon Preserve and Trail

Los Peñasquitos Canyon Preserve is an open space park, including a system of trails, jointly owned and administered by the City and County of San Diego, and accessible on the south side of Sorrento Valley Boulevard, approximately 1.0 mi east of Vista Sorrento Parkway. The Preserve is located approximately 0.17 mi from I-5; however, a hiking trail extends westward beyond the Preserve boundary to Vista Sorrento Parkway. The reserve is approximately 4,000 ac of Peñasquitos and Lopez canyons and is characterized by steep slopes, riparian stream corridors, flat mesa tops, and grassy hillsides. It hosts a diverse collection of flora and fauna. The preserve allows biking and hiking on designated trails. The preserve and trail's status as a publicly owned open space park makes Los Peñasquitos Canyon Preserve and Trail a resource subject to Section 4(f) protection. There would be no use of any of the trails by the proposed project, nor would the project impact any of the access points to the Preserve. Scenic views from the trails would not be substantially impaired, as the canyon topography obscures most views of I-5. This topography also acts as a natural sound barrier. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions, and there would be no change in drainage patterns for the area. In fact for water quality, there is no change to the salinity and turbidity of the water, because there is no change to the existing tidal range. Therefore, the proposed project is not expected to cause a use of Los Peñasquitos Canyon Preserve because the proximity of the project would not impair the protected activities, features, or attributes of the preserve.

Torrey Hills School

Torrey Hills School is a public elementary school in the Del Mar Union School District, located approximately 0.25 mi east of I-5. It is accessible via Calle Mar de Mariposa. The playground and sports field include three backstops, four unlighted basketball courts, eight handball courts, and three tot lots. These facilities are open to the public and publicly owned and are therefore protected under Section 4(f). There would be no use of the resource by the proposed project, and access to the school would not change as the proposed project would not impact Calle Mar de Mariposa. There are several blocks of development between the school and the proposed project, which act as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not substantially impair the protected activities, features, or attributes of the school.

Torrey Hills Neighborhood Park

Torrey Hills Neighborhood Park is a 15.0 ac public park, located approximately 0.40 mi east of I-5. It is accessible from Calle Mar de Mariposa. Facilities at the park include two lighted baseball fields, one large multipurpose field, one unlighted basketball court, picnic tables, and one tot lot. Public access and ownership makes Torrey Hills Neighborhood Park a resource subject to Section 4(f) protection. None of the proposed project alternatives would require a use of any portion of the park. Access to the park would not change as the project would not impact Calle Mar de Mariposa. The topography acts as a natural barrier from freeway noise. Vegetation,



views, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the park.

Torrev Pines State Reserve

Torrey Pines State Reserve (the Reserve) is located in the northwest corner of the City of San Diego. The Reserve is managed by the California Department of Parks and Recreation. The Reserve, as shown in Figure 4, is 2,000 ac of land surrounded by the Pacific Ocean to the west, the City of Del Mar to the north, the community of La Jolla to the south, and I-5 to the east. The Torrey Pines State Reserve consists of several components, including the Main Reserve, an Extension Reserve, Los Peñasquitos Marsh Natural Preserve, and Torrey Pines State Beach. The eastern portion of the Main Reserve and eastern portion of the Los Peñasquitos Marsh Natural Preserve are the portions of the Reserve located closest to the proposed project.

The Reserve includes a visitor center located at 12600 North Torrey Pines Road, and approximately 7.5 mi of hiking trails, 5.5 mi of which are located within the Main Reserve. Public ownership and use of the park and trails within the Main Reserve is provided at the main park entrance off of Camino Del Mar along Torrey Pines Park Road. Four developed viewpoints are located within the trail network (see Figure 4 insert). The Reserve offers a variety of programs for the public and volunteers ranging from interactive presentations and guided tours to trail maintenance. The Reserve is open daily from 8:00 a.m. until sunset. The visitor center opens daily at 9:00 a.m.

The mouth of Los Peñasquitos Lagoon is located at the northern end of the main reserve. Los Peñasquitos Lagoon is encompassed by the Los Peñasquitos Marsh Natural Preserve and is one of the last salt marsh areas and waterfowl refuges remaining in southern California. Los Peñasquitos Lagoon is home to several rare and endangered species of birds and serves as a stopping and nesting place for many migratory birds.

There would be no Section 4(f) use of the Reserve by the proposed project. All improvements associated with the proposed project near the Reserve, including Los Peñasquitos Lagoon, would take place within the existing Caltrans right-of-way. Access would not change as the proposed project would not impact North Torrey Pines Road or Torrey Pines Park Road. The proposed project is visible from the Reserve. Most of the developed viewpoints (see Figure 4 insert) are westerly toward the Pacific Ocean. However, views from the park toward the proposed project would not be affected since the I-5 freeway is visible in the existing condition and improvements to I-5 associated with the proposed project would not substantially alter existing views. Freeway noise in the Reserve is inaudible due to topography and the distance to I-5. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use of the Reserve because the proximity of the project would not substantially impair the protected activities, features, or attributes of the reserve.

Del Mar Heights Elementary School

Del Mar Heights Elementary School is a public elementary school in the Del Mar Union School District, located approximately 0.36 mi west of I-5 on the top of the slope. It is accessible to vehicular traffic on Boquita Drive off of Del Mar Heights Road. The playground and sports fields at the school include one unlighted basketball court, two unlighted baseball fields, one handball court, and two tot lots. These facilities are open to the public on afternoons and weekends.



Public access and ownership qualify these campus facilities as a resource afforded projection under Section 4(f). There would be no use of the school by the proposed project, and access would not be changed as there would be no impact to Del Mar Heights Road in this area. Visual impacts remain consistent with existing views. Noise measurements taken at adjacent receptors indicate existing noise levels between 64 decibels (dBA) and 69 dBA, which is above the 67 dBA Noise Abatement Criteria (NAC) for Category B receptors, which include residences, recreational areas, picnic areas, playgrounds, active sport areas, parks, motels/hotels, schools, churches, libraries, and hospitals. For more information on the fundamentals of noise, please refer to Section 3.15, Noise, in the EIR/EIS. A soundwall at that location was found to be unreasonable. The noise level would increase by three dBA in the future. Since increases in noise less than three dBA are generally not perceptible by the human ear, noise levels would remain consistent the existing conditions. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use of the school because the proximity of the project would not impair the protected activities, features, or attributes of the school.

Del Mar Hills Academy of Arts and Sciences

Del Mar Hills Academy is a public elementary school in the Del Mar Union School District. located approximately 0.24 mi west of I-5, and accessible by vehicular traffic along Mango Drive off of Del Mar Heights Road. The playground and sports field includes two unlighted basketball courts, one asphalt volleyball court, one unlighted baseball field, three tot lots, and a YMCA Boys and Girls Club building. These facilities are open to the public on afternoons and weekends. Public access and ownership qualify these campus facilities as a resource afforded projection under Section 4(f). There would be no use of the resource by the proposed project. and access would not be changed as there would be no impact to Del Mar Heights Road in this area. Noise measurements taken at three receptors on the recreational facilities on the campus indicate existing noise levels between 64 dBA and 69 dBA, which is above the 67 dBA NAC for Category B receptors, which include residences, recreational areas, picnic areas, playgrounds, active sport areas, parks, motels/hotels, schools, churches, libraries, and hospitals. For more information on the fundamentals of noise, please refer to Section 3.15 in the EIR/EIS. The future with no-build would increase the dBA by one. A soundwall at that location was found to be unreasonable. The noise level would increase by three dBA in the future. Since increases in noise less than three dBA are generally not perceptible by the human ear, noise levels would remain consistent the existing conditions. Views of the project from the Academy are very limited and would remain consistent with existing views. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use of Del Mar Hills Academy because the proximity of the project would not impair the protected activities, features, or attributes of the Academy.

Solana Highlands Elementary School and Park

Solana Highlands Elementary is a public elementary school in the Solana Beach School District, located approximately 0.22 mi east of I-5, accessible from Long Run Drive off of High Bluff Drive. Solana Highlands Park is a community park adjacent to the elementary school with two unlighted baseball fields, two unlighted basketball courts and two unlighted half-court basketball courts, two handball courts, and two tot lots. These facilities are open to the public on afternoons and weekends. Public access and ownership qualify these campus facilities as a resource afforded protection under Section 4(f). There would be no use of the resource property by the proposed project, and access would not be changed as there would be no impact to Long Run Drive or High Bluff Drive in this area. Views of the project from the school



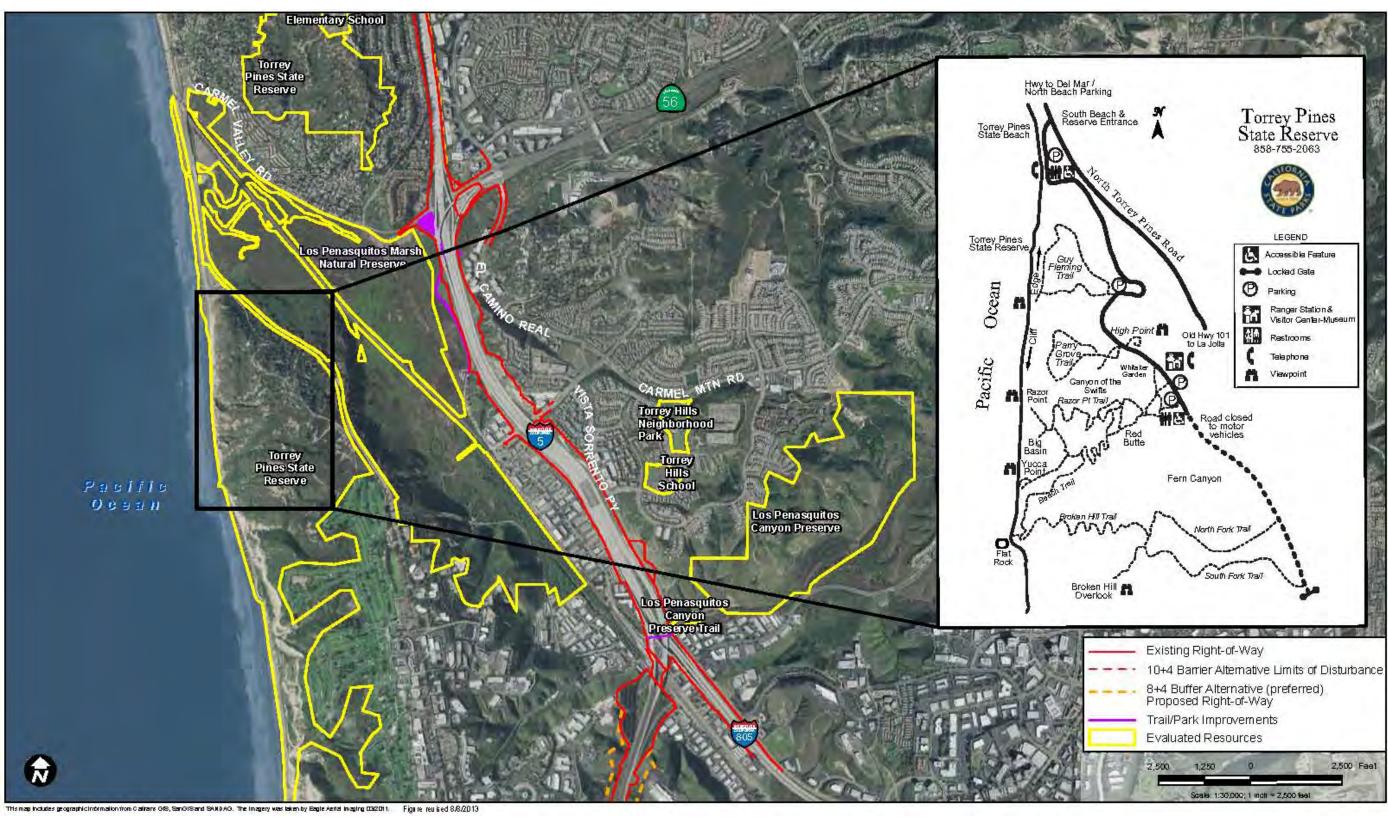


Figure 4: Torrey Pines State Reserve







and park are very limited as there are five blocks of development between the school, park and the proposed project, which also act as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the school and park.

San Dieguito River Park and Coast to Crest Trail

The San Dieguito River Park (SDRP) encompasses approximately 88,000 ac of land, stretching from the mouth of San Dieguito Lagoon east along the San Dieguito River to Ironside Spring on Volcan Mountain, just north of Julian. The San Dieguito River Park is a Joint Powers Authority (JPA) resource. The term "Joint Powers Authority" (JPA) means that some public agencies have agreed to jointly share certain powers, such as the power to manage and acquire land. The SDRP is administered by the San Dieguito River Valley Regional Open Space Park JPA, who is working to create a regional open space greenway and park system by preserving and restoring land along the length of the San Dieguito River watershed. This open space greenway and park system is being integrated by regional walking, equestrian, and bicycle trails that would extend from the Pacific Ocean to Volcan Mountain called the Coast to Crest Trail, which is currently two-thirds complete.

As shown in Figure 5, the coastal area of the SDRP encompasses approximately 440 ac and is bordered by the Pacific Ocean to the west, El Camino Real to the east, Via de la Valle to the north, and the northern edge of the Carmel Valley planning area to the south. The coastal area of the SDRP is bisected by I-5, is located entirely within the coastal zone, and is located within the incorporated boundaries of the Cities of Del Mar and San Diego. A variety of public agencies own land within the coastal area of the SDRP (in addition to the JPA itself): CDFW, State of California 22nd District Agricultural Association, the Cities of San Diego and Del Mar, and Southern California Edison (SCE). SCE, a privately owned utility agency, only owns one parcel along Via de la Valle, and this parcel is in the process of being transferred to the JPA. The property adjacent to and east of I-5 is owned by the JPA. The western area of the SDRP is currently managed by the JPA through implementation of the San Dieguito Wetlands Restoration Project that was developed in collaboration with local, State, and federal agencies including the California Coastal Commission, USFWS, NMFS, CDFW, and the Cities of San Diego and Del Mar. The San Dieguito Wetlands Restoration project was initiated to mitigate impacts on marine fish populations resulting from the cooling water systems of San Onofre Nuclear Generating Station Units 2 and 3.

Access to the coastal area of the SDRP for recreational uses is primarily along the lagoon segment of the Coast to Crest Trail, which exists from El Camino Real to Jimmy Durante Boulevard, a portion of which is parallel to and under I-5. Other public trails in the SDRP coastal area include the Riverpath Del Mar, located near the Del Mar Public Works Yard, along Jimmy Durante Boulevard, as well as the Dust Devil Nature Trail off of El Camino Real (previously called the Mesa Loop Trail). A nature center is also planned along the Coast to Crest trail east of I-5, and a trailside outdoor amphitheatre is currently under construction just east of I-5. Because the SDRP has status as a publicly owned open space preserve, wetlands restoration area, and regional open space greenway and park system, it qualifies as a resource subject to protection under Section 4(f).

The Draft EIR/EIS evaluated whether implementation of the proposed project would have the potential to use small quantities of land in the western portion of the SDRP. Since circulation of the Draft EIR/EIS, all alternatives have been refined in coordination with both State and federal



resource agencies through the NEPA/404 Integration Process to minimize impacts, where possible, by reducing the amount of right-of-way and limiting the grading footprint to minimize impacts to natural resources while still meeting project objectives. The refinements allowed the project to avoid permanently impacting land within the SDRP and eliminate the previous permanent use of small quantities of SDRP land (Figures 6 and 7).

The Coast to Crest Trail would be maintained in its existing placement. The portion of the trail that crosses underneath I-5 and that would be subject to temporary closures during construction activities is within a revocable easement granted by Caltrans and is, therefore, not subject to Section 4(f). In any case, every reasonable effort would be made to maintain the continuity of existing and designated trails, including providing detours when trail access would be temporarily disrupted and implementing the shortest feasible construction period where physically affecting the trail.

Construction of a retaining wall to avoid permanent use of the Coast to Crest trail may require a temporary construction easement for the footing of the retaining wall for the 10+4 Barrier, 10+4 Buffer, and 8+4 Barrier alternatives within the SDRP. If an alternative other than the Preferred Alternative is selected and a temporary construction easement is requested to avoid impacts to the SDRP, then FHWA/Caltrans would coordinate with the JPA regarding a temporary construction easement. The easement would be exempt from Section 4(f) under 23 CFR 774.13(d) because the temporary "occupancy" would require no change in ownership; would involve minor changes; would not interfere with the protected activities, features, or attributes of the SDRP; and would involve full restoration of the easement area.

The project proposes to add the I-5 NC Bike Trail that would extend along the west side of I-5. The I-5 NC Bike Trail is intended for recreational purposes and would enhance San Dieguito River Park trails by connecting with the Coast to Crest Trail on the west side of I-5 north of the San Dieguito River. The connection from the I-5 NC Bike Trail to the Coast to Crest trail within the SDRP would impact 0.04 acre. This connection and the retaining wall would be constructed solely for the purpose of preserving or enhancing the activities, features, and attributes of the recreational Section 4(f) resource. As allowed under the exceptions to Section 4(f) under 23 CFR 774.13(g), Section 4(f) would not be triggered to connect these two trails. Caltrans received an email on May 22, 2013 that JPA concurs that this impact is beneficial and is exempt from Section 4(f) per 23 CFR 774.13(g).

Potential indirect impacts to the facilities, functions, and/or activities within SDRP have been evaluated as discussed below.

No access points of the SDRP would be affected by any alternative. Access to trails would not be affected by any alternative. Specifically in the lagoon trail area, the trailheads for Riverpath Del Mar and Boardwalk would continue to be accessible from Jimmy Durante Boulevard, and access to trail segments east of I-5 would be accessible from the kiosk at the end of San Andres, even during times when the trail underneath I-5 may be affected by construction activities. Access to trailheads for other trails within the SDRP, such as Crest Canyon Trail and Dust Devil Nature Trail, would not be affected by the *I-5 NCC Project*. The Crest Canyon Trail within the park is accessible at Racetrack View Drive, and Dust Devil Nature Trail is accessible from El Camino Real. Impacts to the Coast to Crest Trail would not be considered a permanent use of a Section 4(f) property, as described above.



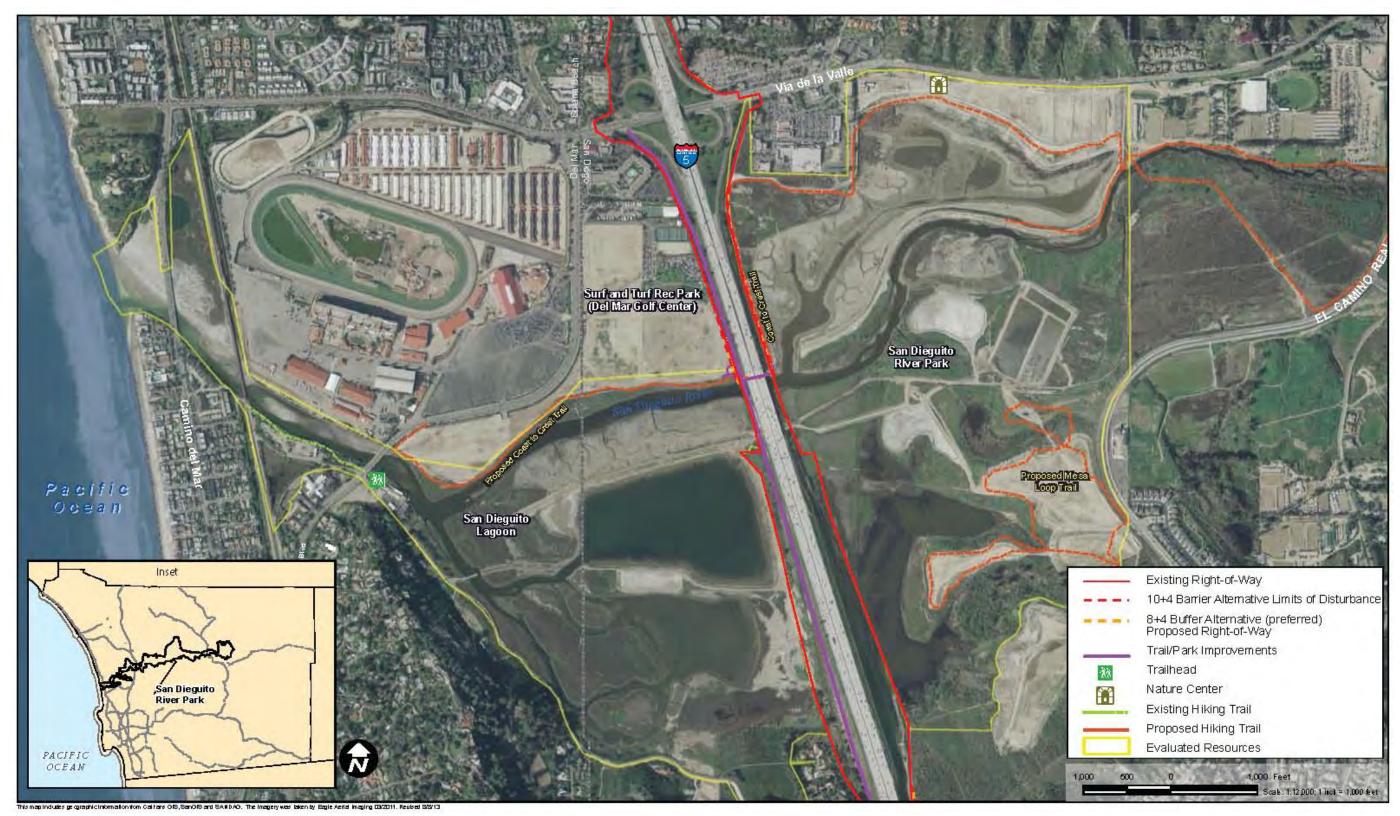


Figure 5: Coastal Area of the San Dieguito River Park



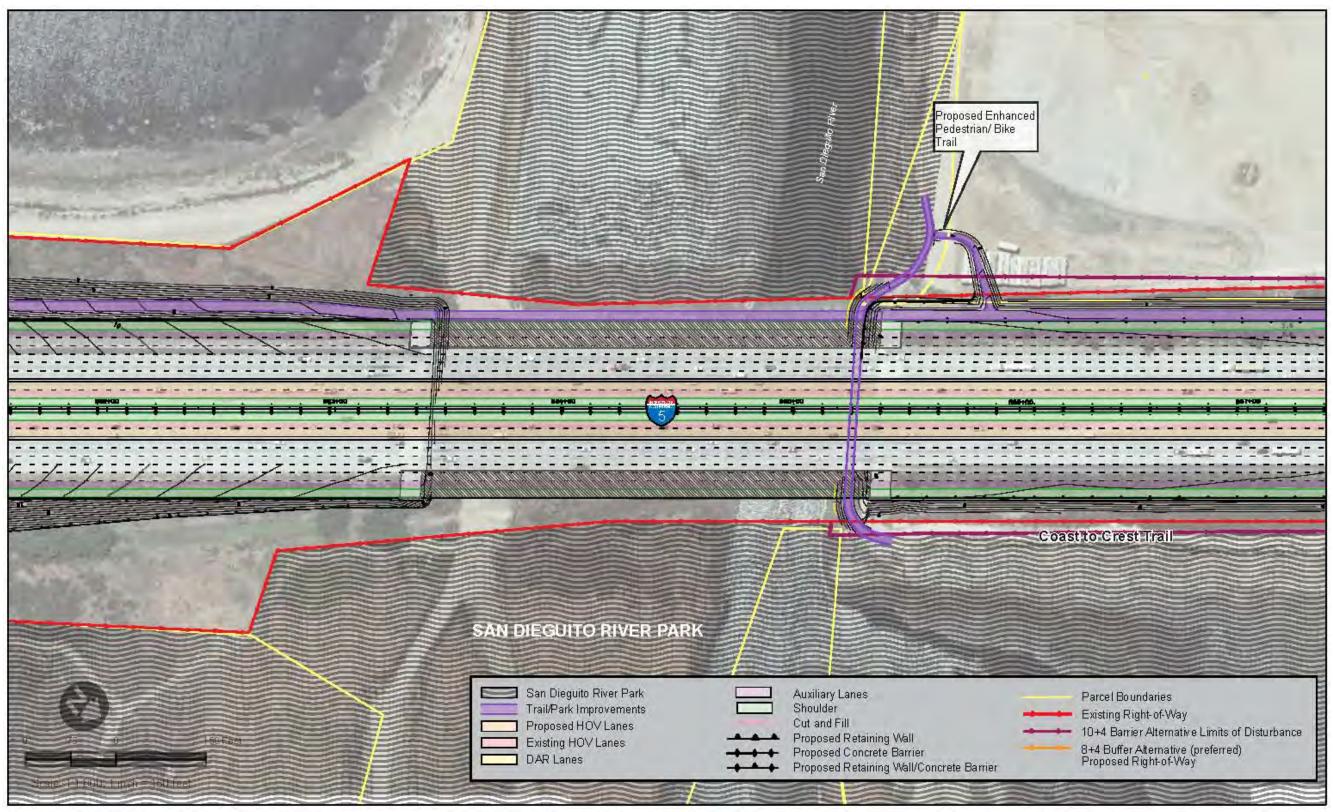


Figure 6: Potential Impacts to the Coastal Area of the San Dieguito River Park



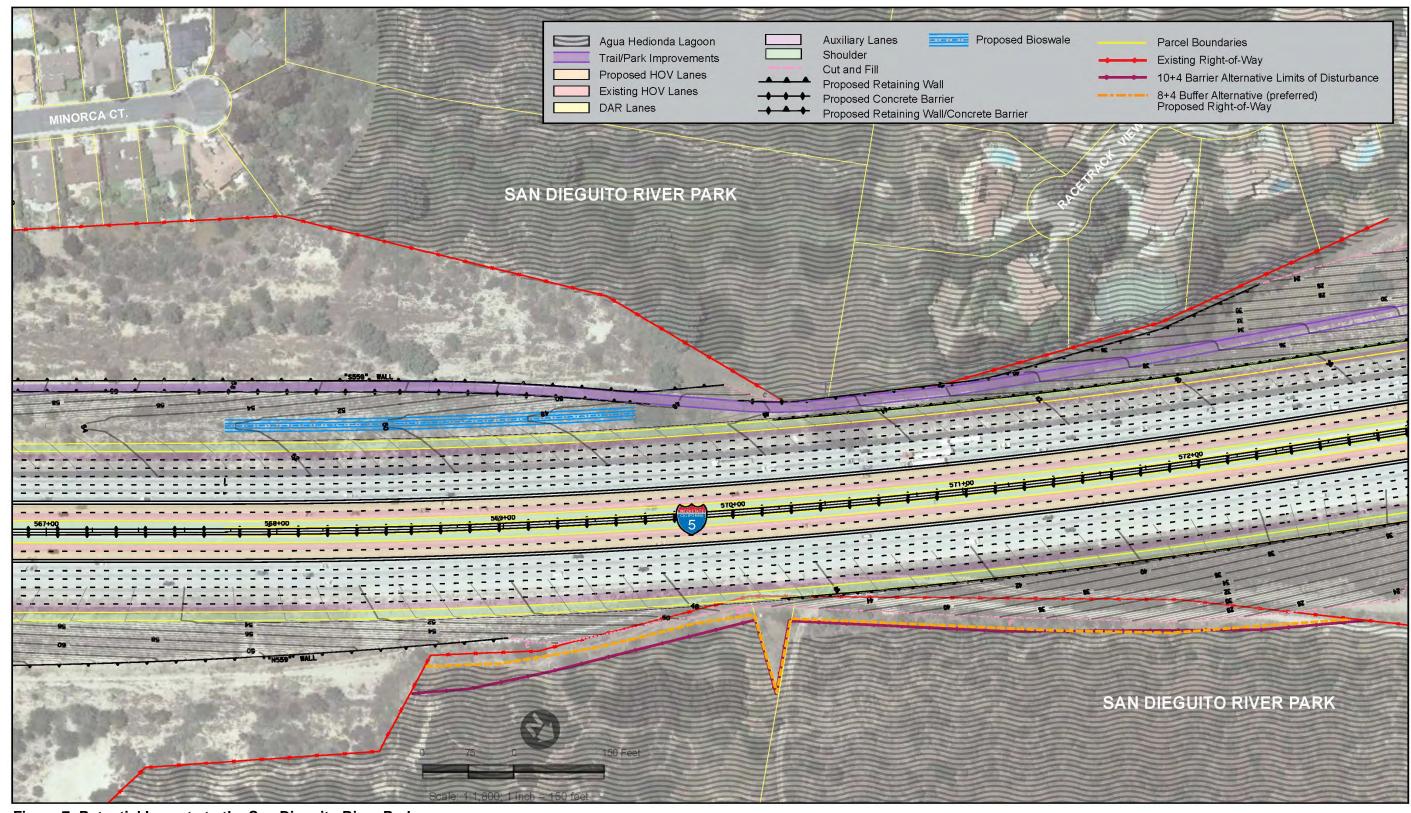


Figure 7: Potential Impacts to the San Dieguito River Park







Implementation of any build alternative would not substantially alter the visual quality of the area because the proposed project entails widening the existing freeway. Currently, I-5 bisects the coastal setting of the SDRP. No alternative would affect the dominant scenic elements of the 4(f) resource, which are the river, marsh areas, and vast open scenic views compared to the impacts of the existing I-5 freeway. Where the viewer focuses on the freeway, it would continue to provide a large industrial element similar to existing conditions.

Noise modeling for the *I-5 NCC Project* projected future I-5 traffic volume increases based on a 10+4 Barrier future development scenario (see *Section 3.15*, *Noise*, of the Final EIR/EIS for details on noise modeling). The noise model identified the existing noise levels and projected the future noise levels at three receptors within the coastal area of the SDRP. The receptor with the loudest existing noise level was 66 dBA. This receptor also had a predicted future noise level at that location of 68 dBA, an increase of two dBA. This two dBA increase was predicted at three noise receptors within SDRP. Noise modeling indicates that similar increases would occur across the entire open lagoon area that dominates the coastal area of the SDRP, typically ranging between two to three dBA. This two to three dBA increase is not generally perceptible to the human ear.

Since no SDRP land permanent use is proposed for this alternative, as defined by Section 4(f), vegetation would remain as it currently exists. Any vegetation removed would be replaced using a native plant palette.

In terms of wildlife, sensitive species such as coastal California gnatcatchers and Belding's savannah sparrows currently use the habitat near the I-5 freeway and are exposed to existing noise levels up to 66 dBA. Implementation of the noise modeling for the 10+4 Barrier alternative would result in a noise increase of an additional two to three dBA, and would not substantially increase the potential for noise to impact these sensitive species. As described in Section 3.21, Threatened and Endangered Species, of the EIR/EIS, there is no single standard or threshold for determining adverse noise effects on bird species. Prior studies that have indicated a possible noise effect threshold for certain species of songbirds have not been scientifically shown to be valid for the species listed above. Although a healthy human ear can barely perceive changes on the order of three dBA, it is unclear what level is perceptible to bird species in general, and less clear as to what is discernible to the above species. Some bird species within the lagoon and its periphery are expected to be exposed to an increase of two dBA, but the relative effects are likely to vary, due to the nonlinear scale in which noise is measured. An increase from 66 to 68 dBA Lea requires a relatively greater amount of acoustic energy than an increase from 56 to 58 dBA Leg. As such, the birds within the future 66 dBA Leg noise contour may be affected to a greater degree than the rest of the populations of these species. It should be noted that under existing conditions, noise in excess of 70 dBA occurs over various wetland and upland habitats along the I-5 NCC Project corridor that either support, or have the potential to support, special status bird species. Although population numbers have undergone natural fluctuations over the years, these species continue to forage, nest, breed, and otherwise consistently occur within suitable habitat during the breeding season in areas subjected to a wide range of noise levels.

In summary, retaining walls have been proposed for the 10+4 Barrier, 10+4 Buffer, and 8+4 Barrier alternatives to avoid use of the park. Implementation of such walls may require a temporary construction easement that is exempt from Section 4(f) per 23 CFR 774.13(d), because it would not impede the ability of the SDRP to function as a publicly owned open regional open space park. Such walls would not be needed for the Preferred Alternative.



Access to the park would not be impeded temporarily or permanently. The proposed project would not permanently interfere with existing trails, including the Coast to Crest trail. The visual character of the park would be unchanged as the coastal area of the SDRP is already bisected by the I-5. The additional lanes constructed as part of the *I-5 NCC Project* would not substantially alter views. Increases in noise levels would not be noticeable to park users. Areas of natural vegetation disturbed through construction would be restored with native plant species. Wildlife, air quality, and water quality would remain similar to the existing conditions. Based on project refinement and evaluation subsequent to circulation of the Draft EIR/EIS, it has been determined that neither the refined 8+4 Buffer alternative (Preferred Alternative) nor any other build alternative would require a *de minimis* finding. No areas of the SDRP would be transferred to a non-recreational transportation use.

Multiple meetings have been held with SDRP stakeholders, including a meeting to discuss conceptual community enhancement projects in 2006, and meetings to update the Executive Director, Citizens Advisory Committee, and JPA Board on project status in 2012 (refer to *Table 5.2, Stakeholder Outreach and Coordination*. More recently, Caltrans met on behalf of FHWA with JPA on March 28, 2013.

In response to JPA request, four commitments have been added to the project:

- 1. Caltrans will work with the JPA to determine if lagoon- or water-themed art and other educational amenities may be incorporated into the freeway trail undercrossing;
- 2. Caltrans will work with the JPA to provide beautification on the concrete facing adjacent to the trail under I-5 and will review the original design to determine what elements can be incorporated into the proposed bridge;
- 3. Caltrans will appoint the *I-5 NCC Project* Project Manager to work as a liaison with JPA staff on design details during the engineering design of the *I-5 NCC Project*, particularly where the freeway interfaces with the trail and park; and
- 4. Caltrans will appoint the Project Manager for the *I-5 NCC Project* to work as a liaison with JPA staff during construction in order to establish procedures to address construction notifications, potential trail closures, and other construction-period issues.

La Colonia Park

La Colonia Park is a 1.79-ac community park located 0.21 mi west of I-5 in the Eden Gardens community of Solana Beach. It is accessible from Stevens Avenue. Facilities at the park include one half-court basketball court, one tot lot, a large grass area for active and passive uses, and a picnic area with barbeques and picnic tables. Public ownership and access qualify La Colonia Park as a resource subject to Section 4(f) protection. There would be no use of the park by the proposed project, and access to the school would not change as the project would not impact Stevens Avenue. Views of the project to the freeway are very limited as there is development between the park and the proposed project, which acts as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the school and park.

Earl Warren Middle School

Earl Warren Middle School is a public school in the San Dieguito Union High School District, located approximately 0.34 mi west of I-5, accessible from Stevens Avenue off of Lomas Santa



Fe Drive. The playground and sports fields include three unlighted basketball courts, two unlighted half-court basketball courts, four backstops, four volleyball nets, and pull-up bars. These facilities are open to the public when school is not in session. They are often rented out to sports leagues on weekends. Public ownership and access qualify these campus facilities as a resource afforded projection under Section 4(f). There would be no use of the resource by the proposed project. Access to the school would not change as the project would not impact Stevens Avenue or Lomas Santa Fe Drive in this area. Views of the project from the school are very limited as there is development between the school and the proposed project, which also acts as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the school.

Skyline Elementary School

Skyline Elementary is a public school in the Solana Beach School District, located approximately 0.18 mi west of I-5, accessible from Lomas Santa Fe Drive. The playground and sports fields include two unlighted basketball courts, three unlighted half-court basketball courts, three handball courts, two back stops, and two tot lots. These facilities are open to the public on afternoons and weekends. This public ownership and access qualify these campus facilities as a resource afforded projection under Section 4(f). There would be no physical use of the facilities by the proposed project, and access to the school would not change as the project would not impact Lomas Santa Fe Drive in this area. Views of the project from the school are very limited as there are several blocks of development, including retail and dining establishments, between the school and the proposed project, which also act as a sound barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the school.

Solana Vista Elementary School

Solana Vista Elementary is a public school in the Solana Beach School District, located approximately 0.33 mi east of I-5, accessible from Santa Victoria. The playground and sports field include one unlighted basketball court, one unlighted half-court basketball court, two handball courts, and one tot lot. These facilities are open to the public on afternoons and weekends. This public ownership and access qualify these campus facilities as a resource afforded projection under Section 4(f). There would be no use of the school by the proposed project, as access to the school would not change and there are no impacts to Santa Victoria. Views of the project from the school would be very limited as there are five blocks of development between the school and the proposed project, which act as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the provisions of Section 4(f) are not triggered.

Glen Park

Glen Park is a public park owned by the City of Encinitas, located approximately 0.37 mi west of I-5, accessible from Orinda Drive. The 4.49-ac park has one unlighted basketball court, one unlighted tennis court, one volleyball court, one tot lot, picnic benches, and a Scout and Youth Center. Public ownership and access make Glen Park a resource subject to Section 4(f) protection. There would be no use of the resource by the proposed project. Access to the school would not change as the project would not impact Orinda Drive. Views of the project



from the park are very limited as there is housing development between the park and the project, which acts as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the park.

George Berkich Park

George Berkich Park is a public park owned by the Cardiff School District, adjacent to Cardiff Elementary School, located approximately 0.48 mi west of I-5. It is accessible from Montgomery Avenue. The 4.5-ac park has one unlighted basketball court and two additional basketball hoops, one unlighted baseball field, one tot lot, and a picnic area with benches. Public ownership and access make George Berkich Park a resource subject to Section 4(f) protection. There would be no use of the resource by the proposed project, and access to the park would not change as the project would not impact Montgomery Avenue. Views of the project from the park are obstructed by several blocks of development and natural topography, which acts as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the park.

Cardiff Sports Park

Cardiff Sports Park is a public park owned by the City of Encinitas located approximately 0.44 mi east of I-5. It is accessible from Lake Drive. The 9.2 ac has four lighted baseball fields. Public ownership and access make Cardiff Sports Park a resource subject to Section 4(f) protection. There would be no use of the park by the proposed project, and access to the park would not change as the project would not impact Lake Drive. Views of the project from the park are obstructed by eight blocks of development and natural topography, which also act as a barrier to freeway noise, vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the park.

Hall Property Community Park

Hall Property Community Park (now named Encinitas Community Park) along the I-5 right-of-way is a park planned for construction by the City of Encinitas. The Hall Property Community Park Final Environmental Impact Report (EIR) was certified by the City in 2008 (EDAW 2008). The City of Encinitas purchased the approximately 44-ac site for park development in May 2001. The Park plan includes a mixture of active and passive uses. Active uses would include softball/baseball fields, a basketball court, multiuse turf fields, a teen center, a dog park, an amphitheatre, a skate park, and possibly an aquatic facility. Passive uses would include gardens, picnic areas, trails, and a scenic overlook (Figure 8). Phase One, including the skate park, the dog park, the soccer fields, ball fields and the softball field, was put out to bid by the City in April 2012, with completion anticipated for 2014.

The City coordinated with Caltrans on the park design to ensure that implementation of the proposed project would not require a 4(f) use of lands planned for the park. In the Hall Property Community Park Final Program EIR, the City has agreed to an easement dedication of land that would provide the right-of-way needed to improve I-5, therefore the provisions of 4(f) are not triggered (23 CFR § 774.11[i]).



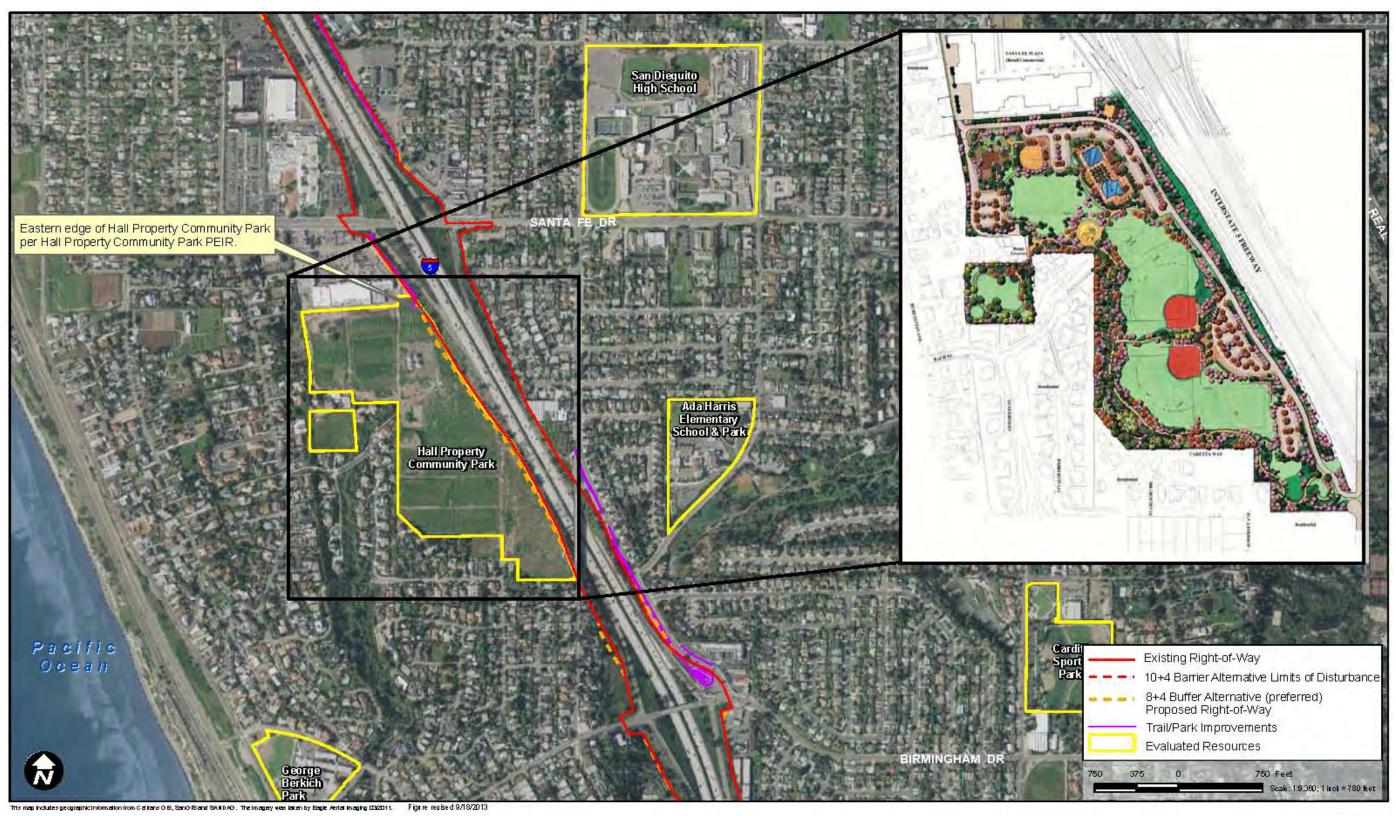


Figure 8: Hall Property Community Park





Park access would not change as the project would not impact Somerset Avenue or Warwick Avenue. The proposed project is visible from the park. However, views from the park toward the proposed project would not be affected since the I-5 freeway is visible in the existing condition and improvements to I-5 associated with the project would not substantially alter existing views. Vegetation, wildlife, air quality, noise, and water quality would remain similar to the existing conditions. The proposed project is not expected to cause a use of Hall Property Community Park because the proximity impacts would not substantially impair the protected activities, features, or attributes of the park.

Ada Harris Elementary School and Park

Ada Harris School is a public elementary school in the Cardiff School District, located approximately 0.14 mi east of I-5. It is accessible from Windsor Road off of Villa Cardiff Drive. Ada Harris Park is a community park contiguous to the elementary school with three unlighted basketball courts, one back stop, one soccer field, one handball court, and one tot lot. These facilities are open to the public on afternoons and weekends. This public access and ownership qualifies these campus facilities as a resource afforded projection under Section 4(f). There would be no use of the resource by the proposed project, and access to the school and park would not change as the project would not impact Windsor Road or Villa Cardiff Drive. Views of the project from the school and park are obstructed by six blocks of development and natural topography, which acts as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the school and park.

San Dieguito High School

San Dieguito Academy is a public school in the San Dieguito Union High School District, located approximately 0.28 mi east of I-5 and accessible from Santa Fe Drive. Facilities at San Dieguito Academy include one unlighted soccer field and dirt track, one unlighted baseball field, four unlighted basketball courts, four lighted tennis courts, and pull-up bars. The sports fields are open to the public during weekday afternoons, and the tennis courts are open to the public on the weekends. Public access and ownership qualify these campus facilities as a resource afforded projection under Section 4(f). There would be no use of the school by the proposed project, and access to the school would not change. Views of the freeway from the school are obstructed by several blocks of development, which acts as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the school.

Mildred MacPherson Park

Mildred MacPherson Park is a public mini-park owned by the City of Encinitas, located approximately 0.40 mi west of I-5. It is accessible from South Vulcan Avenue off of Santa Fe Drive. The 1-ac park includes one unlighted half-court basketball court, one tot lot, and picnic facilities. Public ownership and access make Mildred MacPherson Park a resource subject to Section 4(f) protection. There would be no use of the resource by the proposed project and access to the park would not change as the project would not impact South Vulcan Avenue or Santa Fe Drive. Views of the project from the park are obstructed by several blocks of development, which acts as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is

not expected to cause a use because the proximity of the project would not substantially impair the protected activities, features, or attributes of the park.

Encinitas Viewpoint Park

Encinitas Viewpoint Park is a public neighborhood park owned by the City of Encinitas, located approximately 0.19 mi west of I-5, and accessible from East D Street off of South Vulcan Avenue. The 2.7-ac park includes one tot lot, picnic facilities, and passive recreation space.

The park has specified hours for off-leash dog activity. Public ownership and access qualify the park as a resource subject to Section 4(f) protection. There would be no use of the resource by the proposed project, and access to the park would not change as the *I-5 NCC Project* would not impact South Vulcan Avenue or East D Street. Views of the project from the park are limited as there are several blocks of residential development between the park and the proposed project. The development also acts as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not substantially impair the protected activities, features, or attributes of the park.

Paul Ecke Sports Park/YMCA

The Paul Ecke Sports Park and YMCA, located in Encinitas, is an approximately 9.3-ac park located at 278 Saxony Road north of the intersection of Encinitas Boulevard and I-5. The park is owned by the YMCA, which leases the park to the City of Encinitas. There is a 25-year lease agreement ending in 2014 (with option to renew for an additional 10 years), under which the park is operated by the City of Encinitas. This public use qualifies the park as a resource subject to Section 4(f) protection. The park consists of three lighted baseball fields. These fields are used for baseball, little league baseball, and adult softball, and the outfields are also used for soccer and flag football. The fields are used mainly for organized sports leagues, but the fields are also open to non-league uses when league play is not in action. The park is open from 8 a.m. to 11 p.m. The western edge of the park abuts the existing Caltrans right-of-way.

Under the build alternatives, no permanent impacts would occur to the property, and, therefore, there is also not a Section 4(f) use. A potential temporary construction easement to build a retaining wall that avoids permanent impacts to the park is exempt from Section 4(f) per 23 CFR 774.13(d), because the impact would be minimal and would not cause permanent adverse physical impacts, nor would it interfere with the activities or purpose of the resource. In addition, the temporary impacts period is shorter in duration than the overall construction time of the phase. Should the temporary construction easement be necessary, Caltrans would confer with the City of Encinitas to ensure that the minimal work for the retaining wall would not interfere with the purpose of this resource, as required under Section 4(f). Caltrans received an email from the City of Encinitas on September 16, 2013 concurring that the temporary construction easement to build a retaining wall that avoids permanent impacts to the park constitutes temporary occupancy of the land, and that this project action is exempt from Section 4(f) per 23 CFR 774.13(d) because the impact is minimal and would neither cause permanent adverse physical impacts nor interfere with the activities or purpose of the resource.

Access to the park would not change as the proposed project would not impact Saxony Road at the park's eastern boundary. The park is on top of the slope from the freeway. Improvements to I-5 associated with the proposed project would not dramatically alter the existing view, as they would consist of a retaining wall on the slope between the park and the freeway. Two

noise measurements and future predictions were conducted for the park. Future noise modeling predicted that traffic-generated noise levels at these two receptors would increase by two dBA with the proposed project. This two-dBA increase would not be perceptible to the human ear. Vegetation, wildlife, air quality, and water quality would remain similar to the existing environment. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not substantially impair the protected activities, features, or attributes of the park.

Cottonwood Creek Park

Cottonwood Creek Park is a 8.2-ac public park owned by the City of Encinitas. The park is located west of I-5 at the northeast corner of the Encinitas Boulevard and North Vulcan Avenue, west of the intersection of Encinitas Boulevard and I-5. Cottonwood Creek Park includes two unlighted half-court basketball courts, two lighted tennis courts, a gazebo, a climbing rock, one tot lot, and passive recreation areas, including two nature viewing areas with picnic tables. It is separated from I-5 by existing development and is not immediately adjacent to the freeway. Public ownership and access qualify Cottonwood Creek Park as a resource subject to Section 4(f) protection.

The proposed project would not use any portion of the existing park. There would be a temporary construction easement to build a retaining wall, which would avoid permanent impacts to the park. On behalf of FHWA, Caltrans conferred with the City of Encinitas to ensure that minimal work for the retaining wall would not interfere with the purpose of this resource. Caltrans received an email from the City of Encinitas on March 8, 2013 concurring that the temporary construction easement to build a retaining wall that avoids permanent impacts to the park constitutes temporary occupancy of the land, and this project action is exempt from Section 4(f) per 23 CFR 774.13(d) because the impact is minimal and will not cause permanent adverse physical impacts nor will it interfere with the activities or purpose of the resource.

Access to the park would not change as the proposed project would not impact North Vulcan Avenue or Encinitas Boulevard. Commercial development partially obscures the proposed project from Cottonwood Creek Park. However, unobscured views would not be affected since the I-5 freeway is visible in the existing condition. The view of the freeway is dominated by the view east down Encinitas Boulevard showing the bridge passing over Encinitas Boulevard. Improvements to I-5 associated with the proposed project would not dramatically alter the existing view, as they would consist primarily of the widening of the existing bridge. Commercial business, distance from the proposed project, and terrain act as barrier from freeway noise for the park. Vegetation, wildlife, air quality, and water quality would remain similar to the existing environment. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not substantially impair the protected activities, features, or attributes of the park.

Orpheus Park

Orpheus Park is a neighborhood park owned by the City of Encinitas, located approximately 0.24 mi west of I-5, accessible from Orpheus Avenue. The 2.9-ac park includes one tot lot, picnic facilities, limited off-leash dog hours, and passive recreation space. Public ownership and access qualify Orpheus Park as a resource subject to Section 4(f) protection. There would be no use of the resource by the proposed project, and access to the park would not change as the project would not impact Orpheus Avenue. Views of the project from the park are obscured by topography and several blocks of residential development, which act as a barrier to freeway noise.

Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the park.

Batiquitos Lagoon

Batiquitos Lagoon Ecological Reserve is a wetlands preserve serving a variety of wildlife habitat on the coast between Encinitas and Carlsbad in Figure 9. It is surrounded by the Pacific Ocean to the west; steep hills to the south traversed by La Costa Avenue; gentle slopes to the north adjacent to the Aviara development and golf course; and San Marcos Creek to the east, which serves as the connection between Batiquitos Lagoon and the watershed farther east. Batiquitos Lagoon is approximately 610 ac in size. The lagoon's watershed includes portions of the Cities of Carlsbad, San Marcos, and Encinitas. The lagoon's primary freshwater tributaries are San Marcos Creek to the east, which flows under El Camino Real, and Encinitas Creek to the south, which empties into the lagoon under La Costa Avenue.

Batiquitos Lagoon is currently owned by the State of California and is preserved as a State Ecological Reserve with public access, a resource subject to Section 4(f) protection. Batiquitos Lagoon is currently managed by a number of agencies as a restoration project initiated by the Port of Los Angeles to compensate for the loss of marine resources resulting from construction of new cargo terminals in the Port of Los Angeles. The Port of Los Angeles is working with the City of Carlsbad, the California Department of Fish and Wildlife (CDFW), the California State Lands Commission, the U.S. Fish and Wildlife Service (USFWS), and the National Marine Fisheries Service (NMFS) to restore Batiquitos Lagoon. Batiquitos Lagoon includes a Nature Center, located at 7380 Gabbiano Lane, and a public hiking trail two mi long. The public hiking trail begins at the end of Gabbiano Lane and continues almost to El Camino Real on the east end of the lagoon (see Figure 9). Public access to the trail is provided from the public parking lot near the nature center and four public parking lots along Batiquitos Drive (Batiquitos Lagoon Foundation 2006).

There would be no use of Batiquitos Lagoon by the proposed project. All improvements associated with the proposed project, including proposed enhancements to the existing park and ride lot, and proposed trails, would take place within the existing Caltrans right-of-way. This is due to a retaining wall on the north portion of the middle basin to the west of I-5 that would avoid impacts to this resource. Access would not change as the *I-5 NCC Project* would not impact Gabbiano Lane or Batiquitos Drive. The proposed project is visible from Batiquitos Lagoon. Views from the park toward the proposed project would not be substantially affected as the freeway is visible in the existing condition and improvements to I-5 associated with the proposed project would occur within the right-of-way and would not dramatically alter the existing view.

Existing noise levels at Batiquitos Lagoon are estimated to be between 62 and 64 dBA. Modeling indicates the proposed project would result in a noise increase of approximately two to four dBA, with maximum sound levels estimated at 68 dBA. Vegetation would remain similar to the existing conditions. Wildlife in the area include gnatcatchers on the north shore in east and west basins near the Caltrans right-of-way. Gnatcatchers fly in and out of Caltrans right-of-way all along the east basin. Also in the east basin is an island near the Caltrans right-of-way where Least Terns nest. There is no single standard or threshold for determining adverse noise effects on bird species, however, and studies that have identified noise effects for other bird species have not been scientifically proven to affect the species found at Batiquitos Lagoon. Furthermore, existing noise in excess of 70 dBA occurs over various wetland and upland habitats along the *I-5 NCC Project* corridor where bird populations exist.



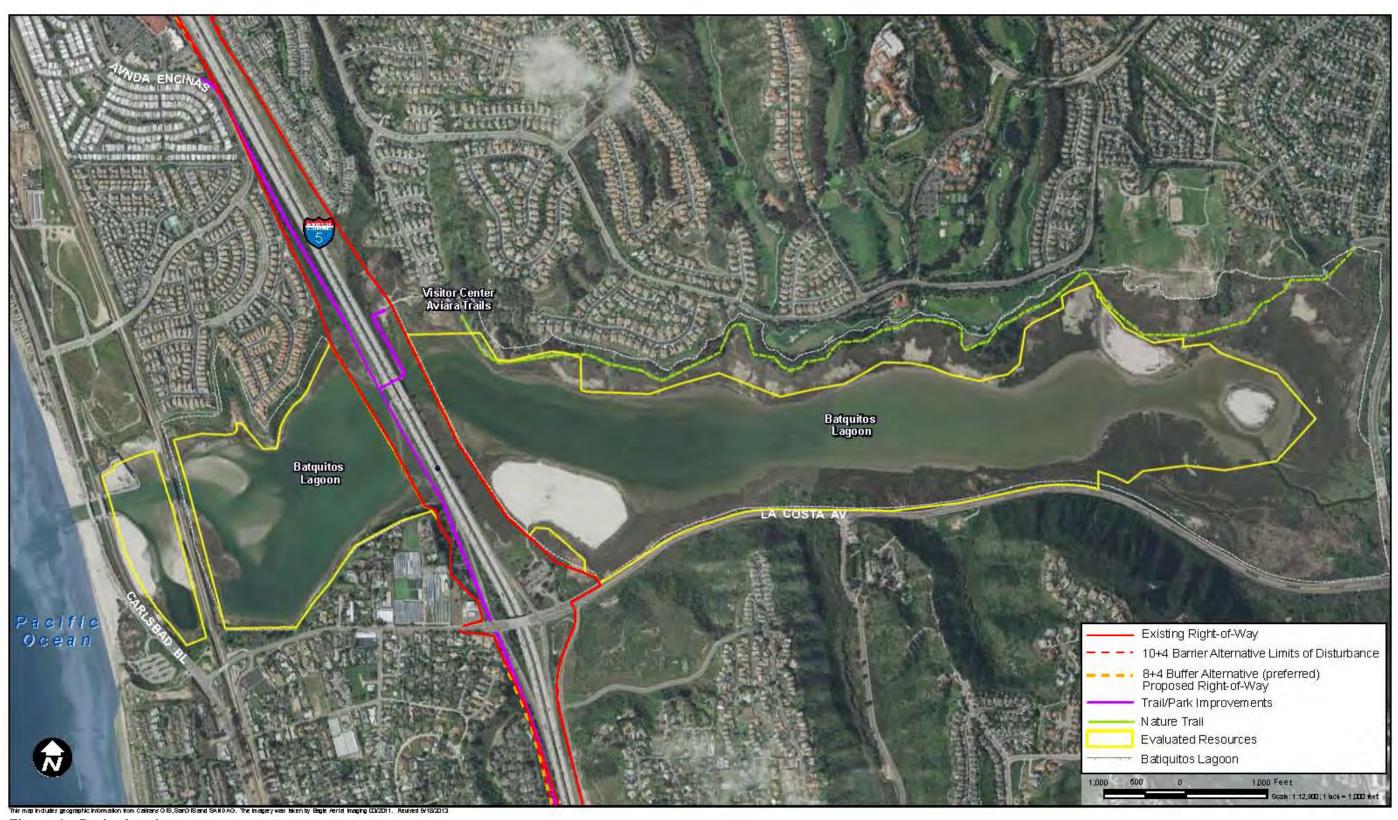


Figure 9: Batiquitos Lagoon







In addition, wildlife and air quality would remain similar to the existing conditions. The water quality would have an increased benefit, as documented in the Supplemental EIR/EIS, because the optimized bridge design would reduce flow velocities and scour under the bridge while still transporting sand and sediments similar to existing conditions. Inlet velocities would remain similar to existing conditions due to the fixed nature of the recently modified inlet. Sediment transport under extreme flood velocities also would be reduced with the optimized channels under the optimized bridge resulting in less scour and erosion along the channels. Overall, the optimized I-5 bridge was found to result in increased tidal range in the eastern basin, which would result in increased salt marsh and other intertidal habitats (with less subtidal habitats), enhanced flushing, and improved water quality within the lagoon. Therefore, the proposed project is not expected to cause a use of Batiquitos Lagoon because the proximity impacts would not substantially impair the protected activities, features, or attributes of the lagoon.

Aviara Trails

The Lagoon Trail of the Aviara Trails system is 2.1 mi in length and parallels the Batiquitos Lagoon's north shore. It is located approximately 0.15 mi east of I-5 and is accessible to the public from Gabbiano Lane. The trail's status as a publicly owned recreation area makes the Aviara Trails a resource subject to Section 4(f) protection. There would be no use of the trail by the proposed project. Access to the trail could include trail improvements extending the trial into Caltrans right-or-way if maintenance agreements are reached. Otherwise there is no change to public streets as the project would not impact Gabbiano Lane. The proposed project is visible from the Lagoon Trail. Views from the trail toward the proposed project would not be substantially affected since the I-5 freeway is visible in the existing condition. Improvements to I-5 associated with the proposed project would not dramatically alter the existing view. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not substantially impair the protected activities, features, or attributes of the trails.

South Carlsbad State Beach

South Carlsbad State Beach is a 3-mi stretch of beach, located approximately 0.33 mi west of I-5. It is accessible from Carlsbad Boulevard. The beach is open to the public for swimming, surfing, fishing, picnicking, and camping. Public ownership qualifies South Carlsbad State Beach as a resource subject to Section 4(f) protection. There would be no use of the beach by the proposed project. Access to the beach would not change as the *I-5 NCC Project* would not impact Carlsbad Boulevard. The proposed project has limited views from the beach due to topography and development located, including a power plant, between the beach and the proposed project. Unobscured views from the beach towards the proposed project would not be substantially altered since I-5 is visible in the existing conditions. The improvements to I-5 associated with the proposed project would not dramatically alter existing views. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not substantially impair the protected activities, features, or attributes of South Carlsbad State Beach.

Poinsettia Park

Poinsettia Park is a 42-ac public park, located approximately 0.35 mi east of I-5, and accessible to the public from Hidden Valley Road. Facilities at the park include three lighted baseball fields, ten lighted tennis courts, two lighted basketball courts, one lighted soccer field, picnic tables, and one tot lot. Public ownership and access quality make Poinsettia Park a resource



subject to Section 4(f) protection. There would be no use of the resource by the proposed project. Access to the park would not change as the project would not impact Hidden Valley Road. Views of the project from Poinsettia Park are limited as there is development between the park and the freeway, which acts as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the park.

Car Country Park

Car Country Park, owned by the City of Carlsbad, is a small 1.03-ac passive recreation area along Paseo Del Norte. The park is located immediately adjacent to I-5, and situated between several car dealerships to the north and south. The park contains a picnic table, landscaping, and a meandering sidewalk. Public ownership and access qualify Car Country Park as a resource subject to Section 4(f) protection. There would be no use of the resource by the proposed project. Access to the park would not change as the project would not impact Paseo Del Norte. The proposed project is visible from Car Country Park, as there are no barriers between the park and I-5. However, views from the park toward the proposed project would not be substantially affected since the I-5 freeway is visible in the existing condition and improvements to I-5 associated with the proposed project would not dramatically alter the existing view. Existing noise levels are estimated at approximately 75 dBA. Future noise levels with the proposed project are anticipated to increase between three to five dBA at this location, which would likely be perceptible to the human ear. However, the estimated increase in noise due to the project would not likely deter people who might otherwise decide to visit the park. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not substantially impair the protected activities, features, or attributes of the park.

Cannon Park

Cannon Park is a 2.4-ac public park, located approximately 0.35 mi west of I-5, accessible from Cannon Road and Carlsbad Boulevard. The park has one basketball court, one volleyball court, one backstop, picnic tables, and a tot lot area. Public ownership and access qualify Cannon Park as a resource subject to Section 4(f) protection. There would be no use of the resource by the proposed project, and access to the park would not change as the project would not impact Cannon Road or Carlsbad Boulevard. Views from the park toward the proposed project would remain unchanged since existing views are obstructed by topography, residential and commercial development, as well as by the Encina Power Plant. This development also acts as a barrier from freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the park.

Carlsbad State Beach

Carlsbad State Beach is a 1.4-mi stretch of State-owned beach, located approximately 0.40 mi west of I-5 and accessed along Carlsbad Boulevard. The beach is open to the public for swimming, surfing, fishing, scuba diving, sunbathing, and other beach-related activities. Public ownership and access qualify Carlsbad State Beach as a resource subject to Section 4(f) protection. There would be no use of the beach by the proposed project. Access to the beach would not change as the project would not impact Tamarack Avenue. The proposed project cannot be viewed from the beach as there are many blocks of development, including the



Encina Power Plant, between the beach and the proposed project. Freeway noise is inaudible from the beach due to distance from I-5, wave action from the ocean, and existing development and topography. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not impair the protected activities, features, or attributes of the beach.

Coastal Rail Trail – Carlsbad

The Coastal Rail Trail in Carlsbad is a 1.2-mi stretch of trail, located approximately 0.33 mi west of I-5, accessible from Tamarack Avenue and Oak Avenue. Activities on the trail include walking/jogging and biking. Public ownership and access qualify the Coastal Rail Trail as a resource subject to Section 4(f) protection. There would be no use of the resource by the proposed project, and access to the trail would not change as the project would not impact Tamarack Avenue or Oak Avenue. The proposed project cannot be viewed from the trail as there are several blocks of residential and commercial development between the park and the proposed project, which acts as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not substantially impair the protected activities, features, or attributes of the trail.

Chase Field

Chase Field is a 2.7-ac playing field located approximately 0.07 mi west of I-5. It is accessible from Harding Street off of Carlsbad Village Drive. Facilities include three lighted baseball fields and a snack bar. The field's status as a publicly owned park with public access qualifies the field as a resource subject to Section 4(f) protection. There would be no use of the field by the proposed project, and access to the field would not change as the project would not impact Harding Street or Carlsbad Village Drive in this area. Views from the field toward the freeway are obscured by two blocks of development, which also act as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not substantially impair the protected activities, features, or attributes of Chase Field.

Pine Avenue Community Park

The Pine Avenue Community Park is a 7.7-ac park adjacent to Chase Field, located approximately 0.11 mi west of I-5 and accessible from Harding Street off of Carlsbad Village Drive. Facilities at Pine Avenue Park include a lighted soccer field, a lighted baseball field, two half-court basketball courts, picnic tables, and a tot lot area. Public ownership and access qualify the park as a resource subject to Section 4(f) protection. There would be no use of the park by the proposed project, and access to the park would not change as the project would not impact Harding Street or Carlsbad Village Drive in this area. Views of the project from the park are obscured by two blocks of development, which also act as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity of the project would not substantially impair the protected activities, features, or attributes of the park.

Holiday Park

Holiday Park is a 5.9-ac public park, owned by the City of Carlsbad, located on the corner of Chestnut Avenue and Pio Pico Drive (Figure 10). Holiday Park features horseshoe pits, a picnic



area, a tot lot play area, restrooms, and large shade trees. There would be no use of Holiday Park by the proposed project. However, implementation of the 10+4 Barrier alternative would require the use of an up to 0.73-ac strip of the existing Pio Pico Drive. The location of this rightof-way use is shown in Figure 10. Currently, parking is allowed on the east side of Pio Pico Drive. The loss of this existing street right-of-way would stretch approximately 800 ft along Pio Pico Drive and displace on-street parking. Based on an assumption of one parking space equaling 20 ft, the loss of 800 ft of available parking would result in a loss of 40 available parking spaces. Three small parking lots exist at the park itself with approximately 30 parking spaces each, resulting in a net total of approximately 90 parking spaces. Five of these parking spaces are reserved for handicapped parking. Street parking is allowed on the majority of the streets surrounding the park. Field reconnaissance at the park was conducted on two separate occasions to determine if parking was constrained in the existing condition. One site visit was conducted on a summer evening during the workweek when it was expected that the majority of residents surrounding the park were home. Another was conducted on a Saturday afternoon in the summer when it can be expected that the park would have a large number of patrons. During both visits, it was observed that the parking lots adjacent to the park were approximately half full; fewer than 10 cars were observed along Pio Pico Drive itself, and the majority of the street parking surrounding the park was vacant. Consequently, the loss of parking along Pio Pico Drive would not substantially reduce parking available for Holiday Park. Only the 10+4 Barrier alternative would impact street parking along Pio Pico Drive next to Holiday Park, and there is ongoing coordination with the City of Carlsbad regarding the City's parking concerns. Access patterns would change slightly with the loss of on-street parking along Pio Pico Drive, but adequate parking would remain available in the immediate vicinity.

Existing views of the freeway atop a low embankment would be replaced by a retaining wall, topped by a proposed soundwall. Although the wall would alter views to the west, this would not affect activities at the park. Additionally, noise levels would actually be reduced slightly with construction of the soundwall. The retaining/soundwall would be between 12 to 15 ft in height and feature architectural detailing (see EIR/EIS Figures 3-7.65 through 3-7.68). Landscaping would also be provided at the base of the wall. If, during final design, it is found that conditions have substantially changed, noise abatement may not be necessary at some locations. Existing noise levels are between 66 and 75 dBA; with the soundwall noise levels would be reduced to 66 to 67 dBA. The final decision regarding noise abatement would be made upon completion of the project design and ongoing coordination with the City of Carlsbad. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. The proposed project would not cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of the park, as documented in the visual simulations of the park shown in Figures 11a through 11d and discussed in *Chapter 3.7*, *Visual/Aesthetics* of the Final EIR/EIS.



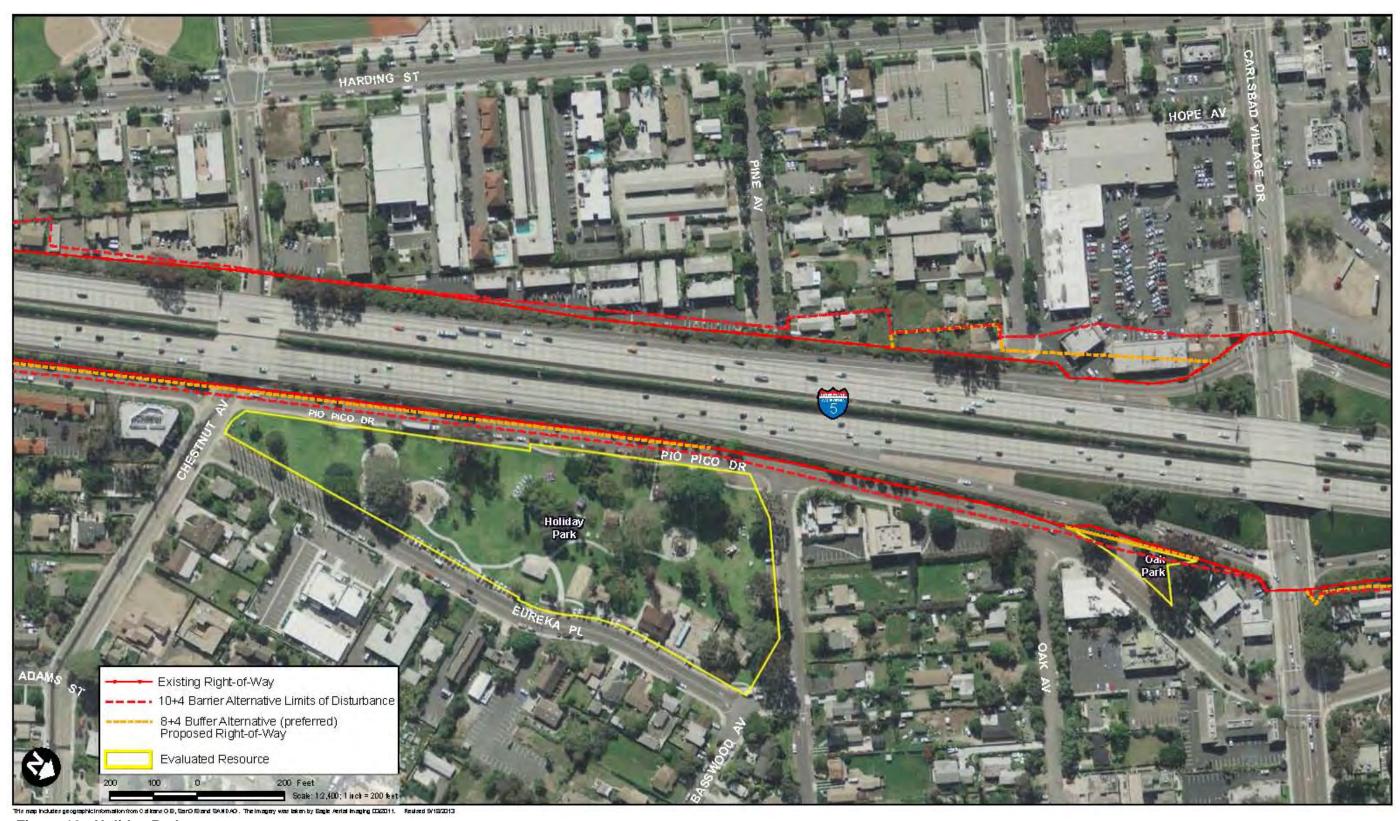


Figure 10: Holiday Park









Figure 11a: Holiday Park in Carlsbad: Existing view looking north



Figure 11b: Holiday Park in Carlsbad: Proposed view looking north





Figure 11c: Holiday Park in Carlsbad: Existing view looking southwest



Figure 11d: Holiday Park in Carlsbad: Proposed view looking southwest



Rotary Park

Rotary Park is a 0.8-ac public park, located approximately 0.48 mi west of I-5. It is accessible from Grand Avenue and Carlsbad Village Drive. The park has a gazebo and benches. Public ownership and access qualify Rotary Park as a resource subject to Section 4(f) protection. There would be no use of the park by the proposed project, and access to the park would not change as the project would not impact Grand Avenue or Carlsbad Village Drive in this area. Views of the project from the park would be obscured by ten blocks of development, including retail and restaurants. This development also would act as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. The proposed project is not expected to cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of the park.

Maxton Brown Park

Maxton Brown Park is a 1.0-ac public park located approximately 0.44 mi west of I-5. It is accessible from Laguna Drive and State Street off of Carlsbad Boulevard. The park includes picnic tables and barbecue facilities. Public ownership and access qualify Maxton Brown Park as a resource subject to Section 4(f) protection. There would be no use of the resource by the proposed project. Access to the park would not change as the project would not impact Laguna Drive, State Street, or Carlsbad Boulevard. Views of the project from the park are obscured by several blocks of development, which act as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. The proposed project is not expected to cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of the park.

Buena Vista Elementary School

Buena Vista Elementary is a public school in the Carlsbad Unified School District, located approximately 0.06 mi east of I-5, accessible from Buena Vista Way off of Pio Pico Drive. Facilities at Buena Vista Elementary include three basketball courts, one volleyball court, and two handball courts. These facilities are open to the public on afternoons and weekends. This public access and ownership qualify these school facilities as a resource afforded projection under Section 4(f). There would be no use of the school by the proposed project, and access to the school would not change as the project would not impact Buena Vista Way or Pio Pico Drive in this area.

Views of the project from the school are limited, as there are three blocks of development between the school and the proposed project. Improvements to I-5 associated with the proposed project would not dramatically alter existing views. The proposed project would reduce freeway noise below existing levels with the construction of the proposed soundwall. The wall height would be 10ft and the length is 433 ft. If, during final design, it is found that conditions have substantially changed, noise abatement may not be necessary at some locations. The final decision regarding noise abatement would be made upon completion of the project design and coordination with the City of Carlsbad. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. The proposed project is not expected to cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of the park.

Hosp Grove Park

Hosp Grove Park is a public park owned by the City of Carlsbad, located approximately 0.38 mi east of I-5 at the corner of Jefferson Street and Monroe Street, near Buena Vista Lagoon.



Facilities at the 65.03-ac park include picnic tables, a tot lot, and a 2.4-km (1.5-mi) walking trail. The remainder of the park is a eucalyptus grove. Public ownership and access qualify Hosp Grove Park as a resource subject to Section 4(f) protection. There would be no use of the park by the proposed project, and access to the park would not change as the project would not impact Jefferson Street or Monroe Street. The proposed project is visible from Hosp Grove Park. However, views to and from the park toward the proposed project would not be affected since the I-5 freeway is visible in the existing conditions, and improvements to I-5 associated with the proposed project would not dramatically alter the existing views. Commercial business, distance from the proposed project, and terrain act as barrier from freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. The proposed project is not expected to cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of the park.

Buena Vista Lagoon

Buena Vista Lagoon is an approximately 350-ac freshwater lagoon that is managed as an ecological preserve by the CDFW. Buena Vista Lagoon, as shown in Figure 12, is located between the Cities of Oceanside and Carlsbad and is bordered by the Pacific Ocean in the west; urban development, SR-78, and Jefferson Street to the east; and urban development to north and south.

The Nature Center at 2202 South Coast Highway in Oceanside operated by Buena Vista Audubon Society. Fishing and passive recreation such as picnicking are permitted at the lagoon. The Nature Center staff provides guided nature walks. The lagoon's status as publicly owned ecological preserve and recreation area makes the Buena Vista Lagoon subject to Section 4(f) protection.

There would be no use of Buena Vista Lagoon by the proposed project. All improvements associated with the proposed project near Buena Vista Lagoon would take place within the existing Caltrans right-of-way. The proposed project is visible from Buena Vista Lagoon. However, views from the lagoon toward the proposed project would not be substantially changed since the I-5 freeway is visible in the existing. Existing noise levels at Buena Vista Lagoon were measured at 53 dBA at one receptor and 63 dBA at two other receptors.

Noise modeling found that noise at the lagoon resulting from operation of the proposed project would increase by no more than two dBA for all three receptors. This increase in noise would not substantially impair Buena Vista Lagoon's ability to function as an ecological preserve. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. In fact for water quality, there is no change to the salinity and turbidity of the water, because there is no change to the existing tidal range. The proposed project is not expected to cause a use of Buena Vista Lagoon because the proximity impacts would not substantially impair the protected activities, features, or attributes of the lagoon.

South Oceanside Elementary School and Park

South Oceanside Elementary is a public elementary school in the Oceanside Unified School District, located approximately 0.17 mi west of I-5. It is accessible from South Horne Street off of Cassidy Street. South Oceanside Park is a community park adjacent to the elementary school with one baseball field and one additional backstop, three basketball courts, two tennis



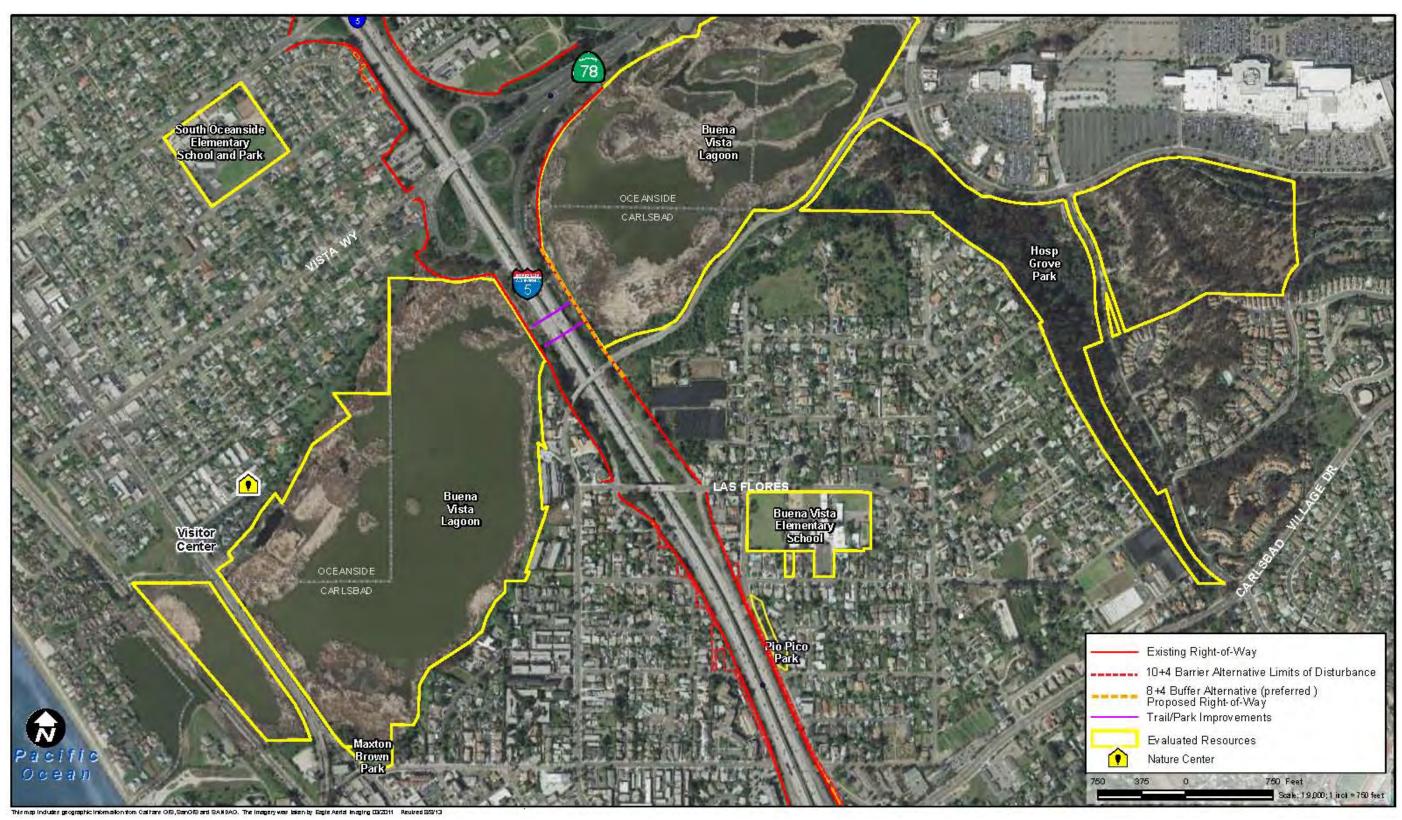


Figure 12: Buena Vista Lagoon







resource subject to Section 4(f) protection. There would be no use of the resource property by the proposed project, and access to the school would not change as the project would not impact South Horne Street or Cassidy Street. Views of the project from the school are limited, as there is development between the school and the proposed project. This development also acts as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. The proposed project is not expected to cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of the school and park.

Marshall Street Swim Center and Park

Marshall Street Swim Center is an indoor public pool located approximately 0.25 mi west of I-5. It is accessible at the end of Marshall Street, off of California Street. The adjacent park has a playground and passive recreation space with open grass areas and picnic benches. Public ownership and access qualify Marshall Street Swim Center and Park as a resource subject to Section 4(f) protection. Access to the swim center and park would not change as the project would not impact Marshall Street or California Street. Views of the project from the property are limited, due to topography and development between the Swim Center/Park and the proposed project. This topography and development also acts as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. The proposed project is not expected to cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of this property.

Palmquist School and Lincoln Middle School

Palmquist Elementary is a public school in the Oceanside Unified School District, located approximately 0.30 mi east of I-5. It is accessible from California Street. Adjacent to Palmquist is Lincoln Middle School, also part of the Oceanside Unified School District and accessible from California Street. The playground and sports field include eight unlighted basketball courts, seven backstops, a cinder track, four volleyball nets, playground equipment, and approximately 10 ac of grass. These facilities are open to the public on afternoons and weekends. This public access and ownership qualifies these campus facilities as resources afforded projection under Section 4(f). There would be no use of the resource by the proposed project, and access to the schools would not change as the project would not impact California Street. Views of the project from the schools are obscured by several blocks of development which also act as a barrier to any freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. The proposed project is not expected to cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of these schools.

Ditmar Elementary School

Ditmar Elementary is a public school in the Oceanside Unified School District, located approximately 0.45 mi west of I-5, accessible from Ditmar Street off of Oceanside Boulevard. The sports fields and playground are open to the public on afternoons and weekends. This public access and ownership qualifies these campus facilities as a resource afforded projection under Section 4(f). There would be no use of the school by the proposed project. Access to the school would not change as the project would not impact Ditmar Street or Oceanside Boulevard in this area. Views of the project from the school are obscured by a canyon and approximately 10 blocks of development, which also act as a barrier to any freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. The proposed



project is not expected to cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of the school.

Center City Golf Course

The Center City Golf Course is an 18-hole municipal golf course open to the public located at 2323 Greenbrier Drive in the City of Oceanside. The golf course is also known as Goat Hill because of the hills and valleys located throughout the golf course. The golf course is located at the northeast corner of the I-5 / Oceanside Boulevard Interchange. Public ownership and access make Center City Golf Course a resource subject to Section 4(f) protection. There would be no use of the resource by the proposed project and access to the park would not change as the project would not impact Greenbrier Drive. The proposed project is visible from the park. However, views from the park toward the proposed project would not be affected since the I-5 freeway is visible in the existing condition and improvements to I-5 associated with the project would not substantially alter existing views. Noise levels at the golf course would increase from 66 dBA in the existing condition to 67 dBA with the proposed project. This one dBA increase would not be perceptible to the human ear. As such, it would not impair play at the golf course. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions.

Ron Ortega Recreation Park

Ron Ortega Recreation Park is a 12-ac community park, located approximately 0.02 mi east of I-5, accessible from Brooks and Maxson Streets off of Mission Avenue. The park includes two lighted baseball fields, two tot lots, a picnic area, and a snack bar that are open to the public. Public ownership and access make Ron Ortega Recreation Park a resource subject to Section 4(f) protection. There would be no use of the park by the proposed project, and access to the park would not change as the project would not impact Brooks or Maxson Streets or Mission Avenue in this area. Views of the project from the park are very limited due to grade separation and existing development between the park and proposed project. A soundwall is proposed at this location and would reduce future project noise levels to below existing levels. The wall height is 12 ft and 14 ft, while the length is 845 ft. The proposed soundwall would not affect the limited views to and from the park. If, during final design, it is found that conditions have substantially changed, noise abatement may not be necessary at some locations. The final decision of the noise abatement would be made upon completion of the project design and the public involvement processes. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. The proposed project is not expected to cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of the park.

Oceanside High School

Oceanside High School is a public high school in the Oceanside Unified School District, located approximately 0.03 mi west of I-5, with fields parallel to southbound I-5. It is accessible from Mission Avenue, and from South Horne Street off of Mission Avenue. Facilities at the high school include eight outdoor basketball courts, and a lighted football field and track. These facilities are open to the public on afternoons and weekends. This public access and ownership qualify these campus facilities as a resource afforded projection under Section 4(f). There is no direct use of the school property by the proposed project. The school access off Mission Avenue would be modified slightly as a result of the proposed improvements to the I-5 / Mission Avenue Interchange, but these modifications would not eliminate any existing turn movements into and out of the school, and pedestrian accessibility would be improved. Measurements



taken at the school's athletic fields, which is a Category B activity, exceed the 67 dBA recommended noise level under the NAC as existing noise levels range between 69 and 75 dBA. The project is predicted to increase noise levels at this location by approximately one to two dBA (refer to EIR/EIS Section 3.15). However, increases in noise less than three dBA are generally not perceptible by the human ear. A new noise barrier is recommended, to reduce noise levels to between 67 and 70 dBA. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. The proposed project is not expected to cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of the school.

Joe Balderrama Park and Recreation Center

The Joe Balderrama Park and Recreation Center is a 3-ac complex located approximately 0.15 mi east of I-5. It is accessible from San Diego Street off of Mission Avenue. The park includes one lighted basketball court, two lighted tennis courts, two handball courts, two tot lots, an indoor recreation area, and picnic areas. Additionally, the Cesar Chavez Resource Center is located on-site, which is a 12,000-sq-ft facility with multipurpose meeting rooms. Both the park and center are open to the public. Public ownership and access qualify the Joe Balderrama Park and Recreation Center a resource as subject to Section 4(f) protection. There would be no use of the resource by the proposed project, and access to the park and center would not change as the project would not impact San Diego Street or Mission Avenue in this area. Views of the proposed project would be obscured by several blocks of residential and commercial development, which act as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing conditions. Therefore, the proposed project is not expected to cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of these facilities.

San Luis Rey Trail

The trail is a 7.2 mile long Class I bicycle trail open to pedestrians. The trail extends from the Neptune access (west end) to the eastern-most point on the College Bridge and follows the path of the San Luis Rey River. This multi-use trail may be used for recreational purposes by other non-motorized users such as hikers, runners, and roller-bladers. The west end of the trail is within a few blocks of the Oceanside Transit Center where commuters can board the Coaster. Amtrak and Metrolink trains or North County Transit District buses, all of which can accommodate bicycles. A proposed parking area, trailhead staging area, and other support amenities for the existing bike path would be located on east side of I-5 / SR-76 interchange within Caltrans right-of-way, and improved as part of the project Community Enhancements. Improvements would also include southern willow scrub and coastal sage scrub restoration. There would be no permanent use of the resource by the proposed project, and access to the trail would be improved. Views of the proposed project from the trail would be limited to the extreme western end in Oceanside. Vegetation, wildlife, air quality, and water quality would remain similar to the existing environment. Therefore, the proposed Community Enhancement is not expected to cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of the trail, but would rather provide beneficial benefit.

Capistrano Park

Capistrano Park is a 14-ac community park located approximately 0.21 mi east of I-5 and accessible from Capistrano Drive. The park includes one lighted baseball field, one unlighted baseball field, two lighted tennis courts, one unlighted basketball court, one tot lot, and picnic tables. Public ownership and access qualify Capistrano Park a resource subject to Section 4(f)



protection. There would be no use of the resource by the proposed project, and access to the park would not change as the project would not impact Capistrano Drive. Views of the proposed project from the park are limited by topography and several blocks of development, which also act as a barrier to freeway noise. Vegetation, wildlife, air quality, and water quality would remain similar to the existing environment. Therefore, the proposed project is not expected to cause a use because the proximity impacts would not substantially impair the protected activities, features, or attributes of the park.



CHAPTER 4.0 – SECTION 4(f) RESOURCES PROPOSED FOR *DE MINIMIS* FINDING

Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 USC 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This revision provides that once the USDOT determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) *de minimis* findings is codified in 23 CFR 774.3 and CFR 774.17.

This chapter identifies uses of Section 4(f) land that would have a "no adverse effect" on protected resources and would be considered de minimis. Such de minimis impacts on publicly owned parks; recreational areas of national, State or local significance; wildlife or waterfowl refuges; or lands from an historic site of national, State or local significance are defined as those that do not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) (49 USC 303[d]; 23 USC 138[d]). When FHWA proposes to make a de minimis impact finding, it must provide an opportunity for public comment on the proposed finding; this was included in the public comment period for the I-5 NCC Project Draft EIR/EIS. In addition, the official(s) with jurisdiction over the Section 4(f) resource in question must: a) with regard to historic properties, concur, in writing, with FHWA's proposed finding of 'no adverse effect' or 'no historic properties affected' in accordance with 36 CFR part 800; or b) in the case of parks, recreation areas, and wildlife and waterfowl refuges, concur in writing that the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection (23 CFR § 774.5[b]). To comply with Section 6009(a), FHWA and Caltrans coordinated with the SHPO, who has jurisdiction over the two historic Built Environment 4(f) resources, and informed them that the proposed project's use of the 4(f) resource is being considered for a de minimis finding. These two historic properties would not be adversely affected.

The following discussion examines instances where the *I-5 NCC Project* would use a portion of resources eligible for protection under Section 4(f), including two park properties and one historic resource. In each instance the amount of land to be used at each resource is quantified. In instances where different build alternatives would result in differing levels of use of the Section 4(f) property, these differences are quantified. The extent to which the proposed project would adversely affect activities, features, or attributes of the Section 4(f) resource is examined using the 8+4 Buffer alternative first, since it is the Preferred Alternative. Letters from the agencies with jurisdiction are included in Appendix A1.

4.1 SAN ELIJO LAGOON ECOLOGICAL RESERVE

The San Elijo Lagoon Ecological Reserve is located between the Cities of Encinitas and Solana Beach and extends inland to the community of Rancho Santa Fe (Figure 13). The Reserve is bordered by the Pacific Ocean to the west, and a mix of residential and undeveloped land to the east, north, and south. The entire Reserve is approximately 1,000 ac in size. It is primarily a shallow-water estuary fed by a 77-square-mi watershed with two main tributaries, Escondido



Creek and Orilla Creek, and is divided into basins by Highway 101, the railway, and I-5. It contains a diverse habitat with six plant communities including coastal strand, salt marsh, freshwater marsh, riparian scrub, coastal sage scrub, and mixed chaparral. The habitat supports a variety of plant and wildlife species.

The Reserve is owned by the CDFW to the west of I-5 and by the County of San Diego to the east of I-5. The County of San Diego and CDFW have an agreement to operate both the eastern and western basins of San Elijo Lagoon as a State Ecological Reserve under the administration of the County of San Diego Department of Parks and Recreation. The boundary of the Reserve is contiguous with Caltrans right-of-way where I-5 bisects the two basins. The Reserve includes over five mi of hiking trails open to the public (see Figure 13). These trails can be reached from the north end of Rios Avenue, Santa Carina Drive, and Santa Helena Drive on the south side of the lagoon in Solana Beach, and along El Camino Real at Orilla Creek in the community of Rancho Santa Fe at the east end. The trailheads in Solana Beach lead to hiking trails, and the trailhead at Orilla Creek is a joint hiking/equestrian facility.

The joint trail system is restricted to the East Basin as the riprap slope protection under the I-5 bridge at Manchester Avenue prevents equestrian passage into the West Basin. A Nature Center, located at 2710 Manchester Avenue in Encinitas on the northwest side of the Reserve, provides County ranger offices, a parking lot, restrooms, drinking water, and a one-mi loop trail.

Visitor usage of the Reserve is estimated between 55,000 to 65,000 visitor use days per year (entry onto the Reserve is equal to one visitor use day). Visitors are primarily residents of the surrounding neighborhoods and jogging is popular along the southern trails. School field trips are held at the Nature Center. The park's status as a publicly owned ecological Reserve and recreation area qualifies the Reserve as a resource subject to protection under Section 4(f).

4.1.1 Impacts

Table 4 shows the area of approximate use for the Reserve that would be required for each alternative.

Table 4: Area of 4(f) Use for the San Elijo Lagoon Ecological Reserve by Alternative

San Elijo Lagoon Ecological Reserve Total Area	10+4 Barrier Alternative	10+4 Buffer Alternative	8+4 Barrier Alternative	8+4 Buffer Alternative (Preferred Alternative)
1000 ac	1.05ac	0.92ac	0.98 ac	0.79 ac

8+4 Buffer Alternative (Preferred Alternative)

Area of Land to Be Used

Implementation of the refined 8+4 Buffer alternative would require the use of approximately 0.79 ac of publicly owned land along the I-5 bridge abutments (including 0.56 ac for temporary construction), which is about 0.079 percent of the total Reserve area (Table 4). Approximately 0.61 ac of this use would occur on property owned by the County of San Diego, while the remaining 0.18 ac would occur on property owned by the CDFW. The area of Reserve land



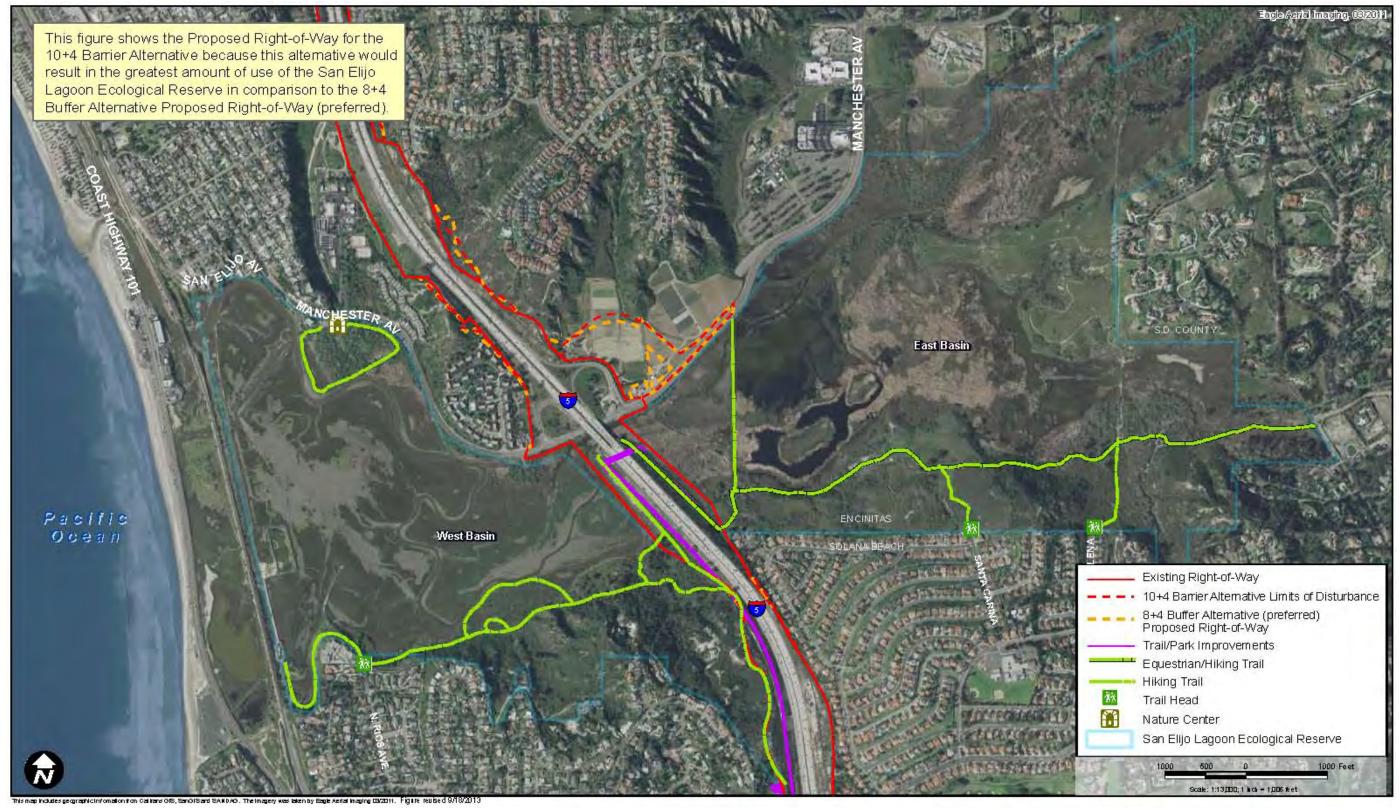


Figure 13: San Elijo Lagoon Ecological Reserve







proposed for use by the refined 8+4 Buffer alternative is considerably smaller than the 10+4 Barrier alternative (described below) due to the change in super-elevations of the roadway which extends the toe of slope due to grading at this location (Figure 14). This minor use and replacement of the trail and maintenance access would not impact any of the other trails or other activity areas that are officially designated as a part of the Reserve or the Nature Center. Additionally, this undeveloped land does not possess any unique features or perform any vital functions that if lost would affect the Reserve ability to function as a 4(f) resource. The use of this land would be for the slope, NC Bike Trail, shoulder, concrete barrier, and retaining wall. Cross sections of these elements are located on Figure 15 and illustrated in detail on Figures 16, 17, and 18.

<u>Access</u>

The Preferred Alternative would not affect any existing means of gaining access to the Reserve. It would not impact any of the existing trailheads, which are well removed from the freeway corridor. Project construction would result in the installation of falsework that would temporarily block an area connecting the East Basin and West Basin, located under the I-5 bridge. This connection weaves through the riprap underneath the south end of the existing freeway bridge. The area is not included in Reserve trail maps and is not a permitted use of Caltrans right-of-way.

Visual Quality

Use associated with the Preferred Alternative would not affect the visual quality of the Reserve. The area proposed for use by the project is located in the southeastern portion of the West Basin where the Reserve borders the existing I-5 Caltrans right-of-way. The area currently consists of undeveloped land located at the base of the berm, constructed as a part of the original freeway development, and a hill that sits above I-5. The minor use would simply extend the Caltrans' right-of-way boundary outward slightly and ultimately result in a view of the area adjacent to I-5 very similar to the existing condition.

Implementation of the Preferred Alternative would not substantially alter the visual quality of the area because the proposed project entails widening the existing freeway. The scenic quality of the Reserve would not be affected because it is bisected by I-5 in the existing condition. The Preferred Alternative would not affect the dominant scenic elements of the 4(f) resource, which are the marsh areas and wide open scenic views, when compared to the views already created by the existing I-5 freeway.

Noise Noise

Existing noise levels in the Reserve range from 60 dBA to 67 dBA. Modeling of future noise conditions indicated that the Reserve would experience a minimal (i.e., one dBA) increase in traffic-related noise. This one dBA increase would be imperceptible to park users.

Vegetation

The Reserve land used by the Preferred Alternative is located in the southeastern portion of the West Basin where the Reserve borders the existing I-5 Caltrans' right-of-way (Figure 13). It currently consists of undeveloped land located at the base of the berm constructed as a part of the original freeway development. About 0.13 ac of vegetation in this area consists of disturbed coastal sage scrub, and several eucalyptus trees. Disturbed coastal sage scrub modified by the proposed project would be mitigated with a 1:1 ratio via habitat restoration/creation ratios agreed upon by the resource agencies as a part of the overall mitigation plan for the proposed project.



Wildlife

No sensitive wildlife species have been detected on the small quantity of Reserve land immediately adjacent to the *I-5 NCC Project*. Implementation of the Preferred Alternative would result in a noise increase of one dBA, and would not substantially increase the potential for noise to impact sensitive species. Therefore, this increase in noise would not substantially impair the Reserve's ability to function as wildlife habitat.

10+4 Barrier Alternative

This alternative would be larger, but would have impacts similar to the refined 8+4 Buffer alternative (Preferred Alternative) with the differences described below.

Area of Land to Be Used

Implementation of the 10+4 Barrier alternative would require use of approximately 1.05 ac of Reserve land on the west side of I-5 at San Elijo Lagoon (including 0.56 ac for temporary construction), which is about 0.11 percent of the total Reserve area (Table 4). Approximately 0.73 ac of this use would occur on property owned by the County of San Diego, while the remaining 0.32 ac would occur on property owned by the CDFW. The area proposed for permanent use associated with the 10+4 Barrier alternative represents the greatest area of use among the four alternatives (Figure 14). Similar to the Preferred Alternative, this minor use would not impact any of the trails or other activity areas that are officially designated as a part of the Reserve or the Nature Center. Additionally, this undeveloped land does not possess any unique features or perform any vital functions that if lost would affect the Reserve ability to function as a 4(f) resource. The use of this land would be for the slope, NC Bike Trail, shoulder, concrete barrier, and retaining wall.

10+4 Buffer Alternative

This alternative would have impacts similar to the refined 8+4 Buffer alternative (Preferred Alternative) with the differences described below.

Area of Land to Be Used

Implementation of the 10+4 Buffer alternative would require the use of 0.92 ac of Reserve land along the I-5 bridge abutments (including 0.56 ac for temporary construction), which is about 0.092 percent of the total Reserve area (Table 4). Approximately 0.64 ac of this use would occur on property owned by the County of San Diego, while the remaining would consist of 0.28 ac of property owned by the CDFW. The area of Reserve land proposed for use by the 10+4 Buffer alternative is larger than for the 8+4 Buffer and smaller than the 10+4 Barrier alternative. In all other respects its potential effects upon the Reserve as a 4(f) resource are as described above.

8+4 Barrier Alternative

This alternative would have impacts similar to the refined 8+4 Buffer alternative (Preferred Alternative) with the differences described below.



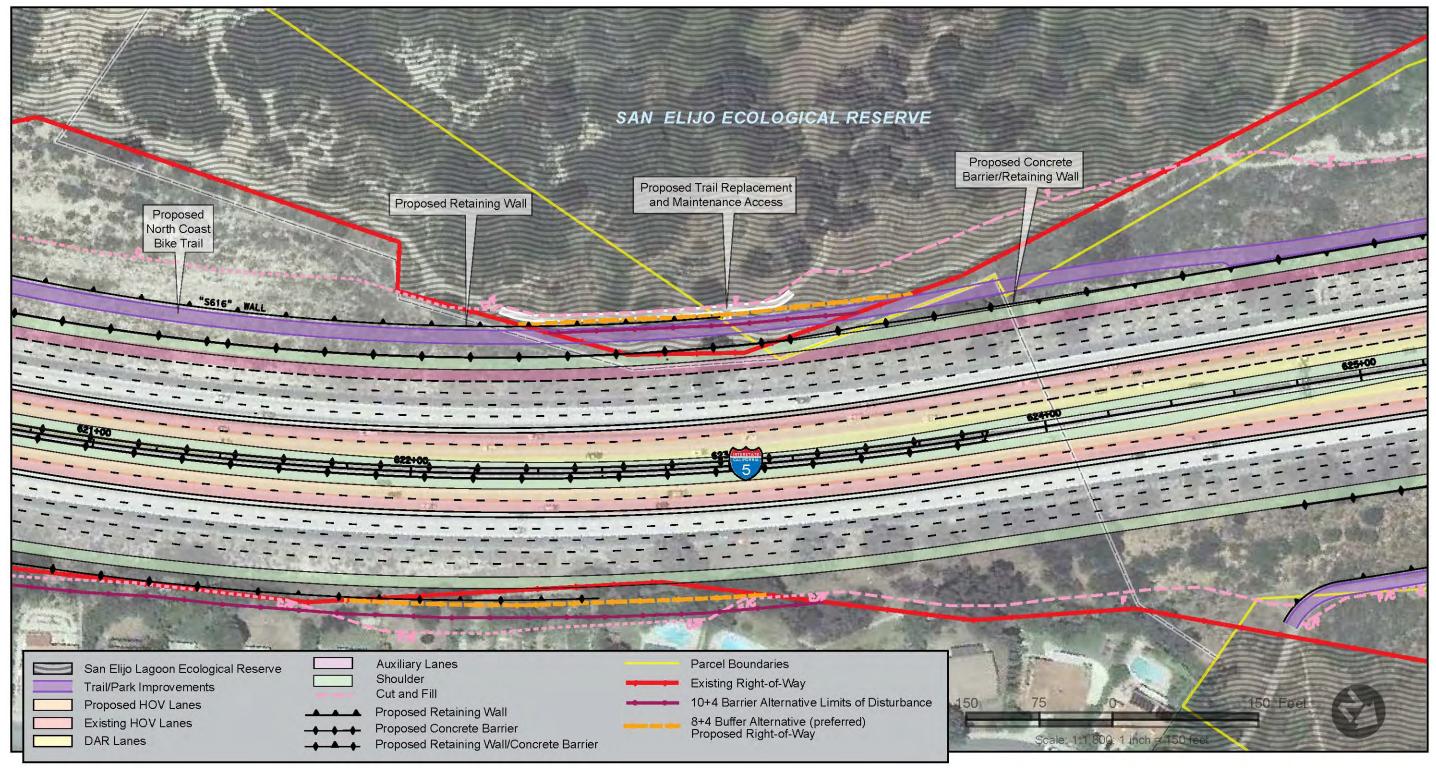


Figure 14: Potential Impacts to the San Elijo Lagoon Ecological Reserve



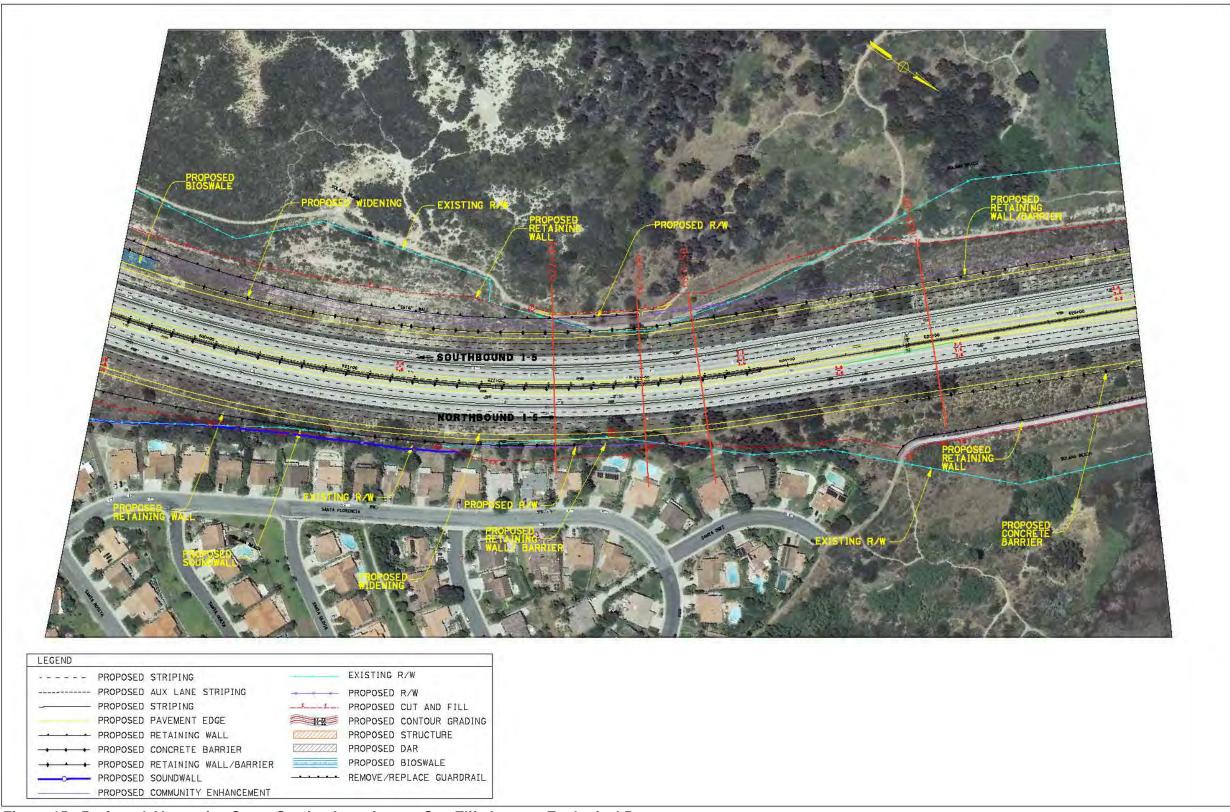


Figure 15: Preferred Alternative Cross Section Locations at San Elijo Lagoon Ecological Reserve



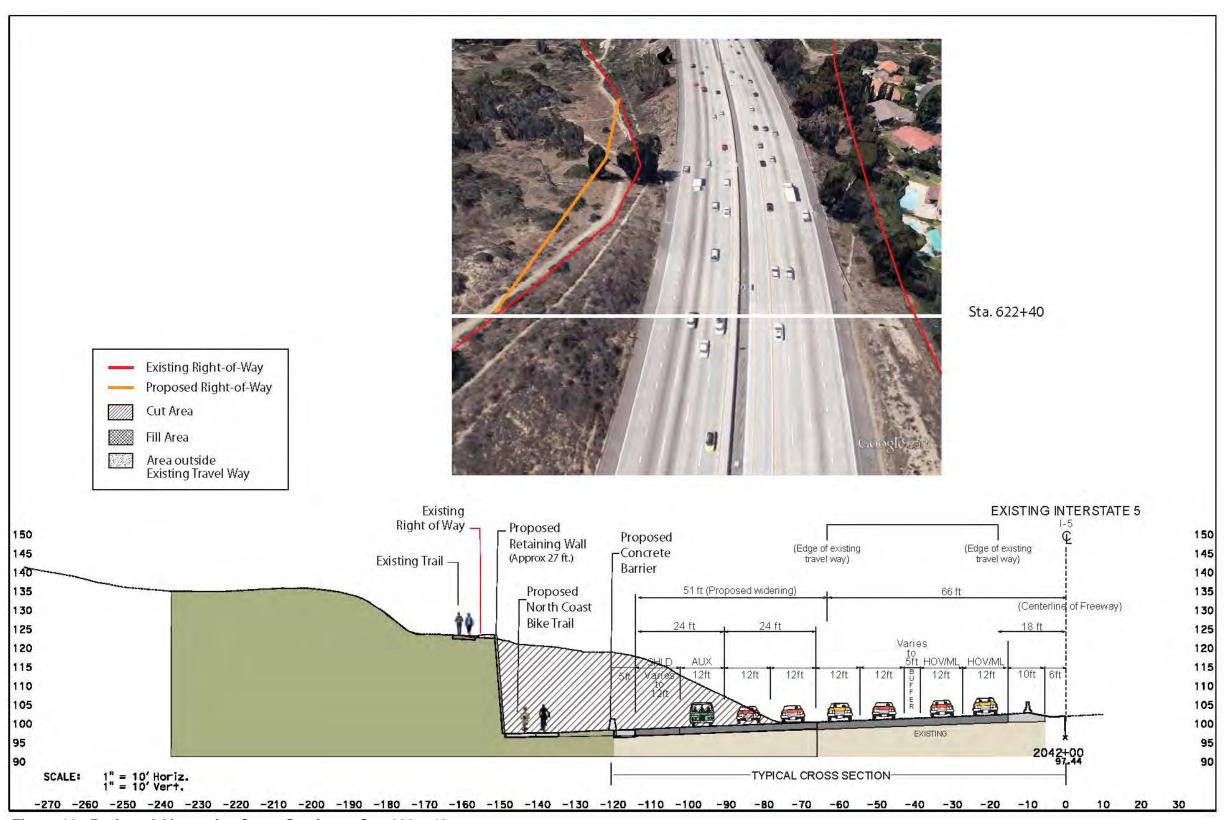


Figure 16: Preferred Alternative Cross Section at Sta. 622 + 40



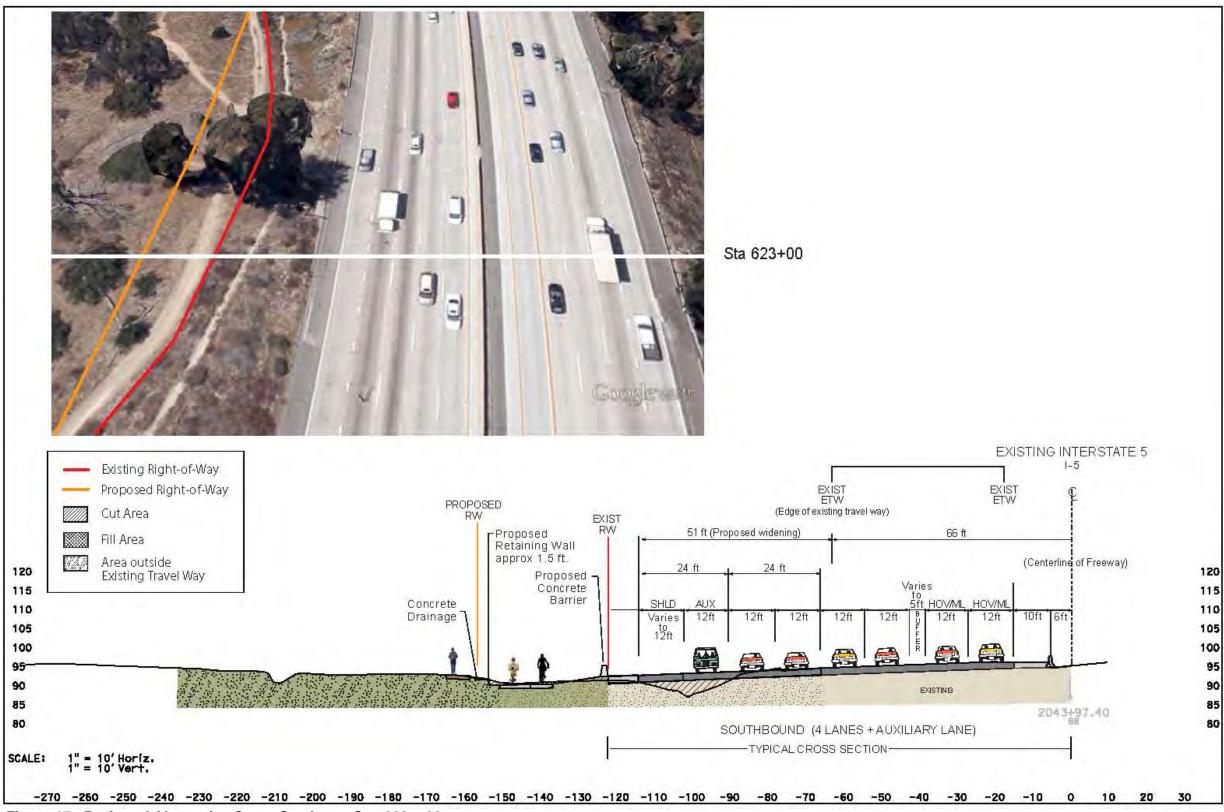


Figure 17: Preferred Alternative Cross Section at Sta. 623 + 00



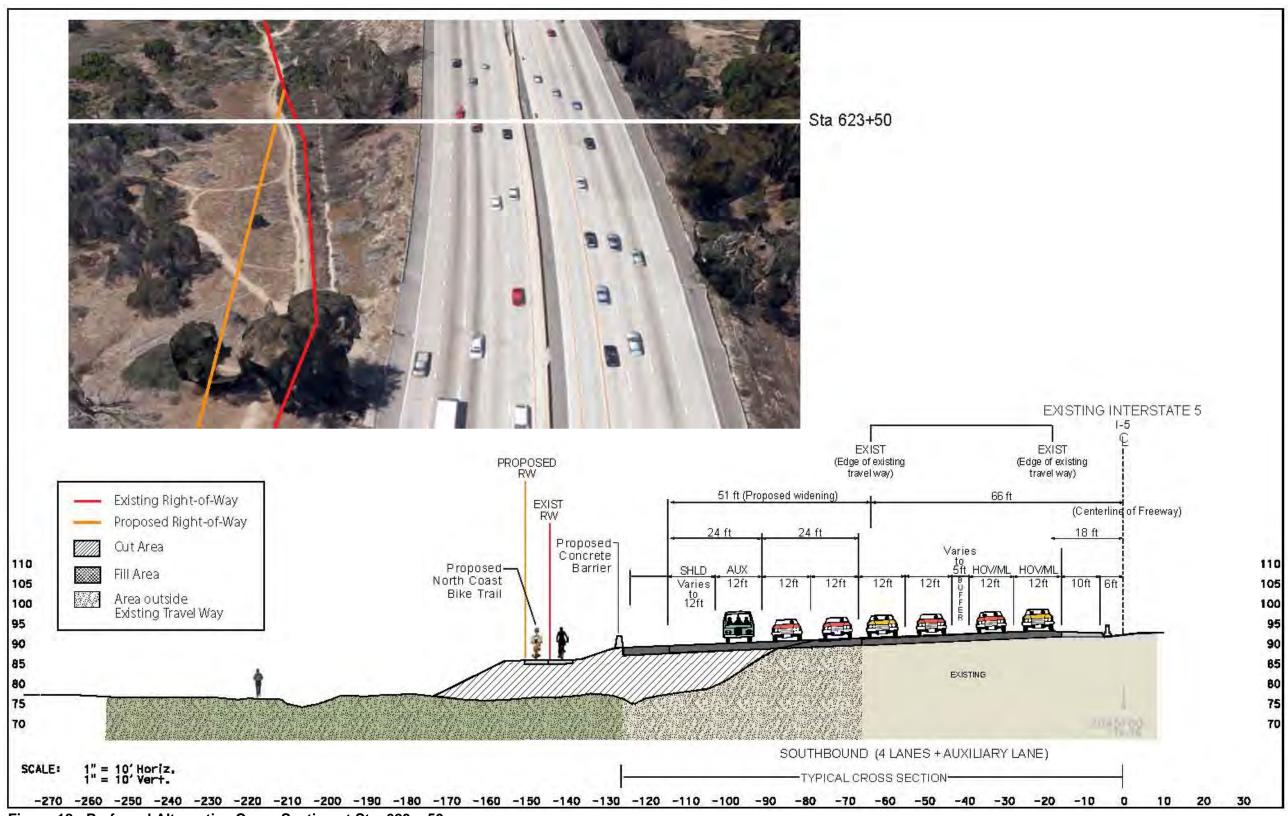


Figure 18: Preferred Alternative Cross Section at Sta. 623 + 50







Area of Land to Be Used

Implementation of the 8+4 Barrier alternative would require the use of approximately 0.98 ac of publicly owned land along the I-5 bridge abutments (including 0.56 ac for temporary construction), which is about 0.098 percent of the total Reserve area (Table 4). Approximately 0.66 ac of this use would occur on property owned by the County of San Diego, while the remaining 0.32 ac would occur on property owned by the CDFW. The area of Reserve land proposed for use by the 8+4 Barrier alternative is 0.2 ac larger than for the 8+4 Buffer alternative. In all other respects its potential effects upon the Reserve as a 4(f) resource are as described above.

4.1.2 No Build Alternative

Implementation of the No Build alternative would not require a use of any portion of the Reserve.

4.1.3 Measures to Minimize Harm

The proposed project has been designed in coordination with the City of Encinitas, as well as State and federal resource agencies to minimize impacts, where possible, by reducing the amount of right-of-way and limiting the grading footprint to minimize impacts to natural resources. After project implementation, access to the Reserve would be enhanced by proposed trailhead improvements and the improvement of a designated trail, permitted as a secondary use within the Caltrans right-of-way, connecting the West and East basins (refer to Chapter 2). Disturbed coastal sage scrub vegetation impacted by the proposed project would be mitigated via habitat restoration/creation ratios agreed upon by the resource agencies as a part of the overall mitigation plan for the proposed project.

4.1.4 De Minimis Finding

Under any *I-5 NCC Project* alternative, the quantity of Reserve land proposed for use is extremely small. Access to existing trailheads and designated trails would be unaffected, and after project implementation would be enhanced. The visual character of the Reserve would not be measurably altered by the freeway widening. The very small quantity of vegetation removed would be mitigated. Increases in traffic-related noise would not be noticeable to park users and would not impair the wildlife habitat functions of the Reserve. It is expected that any build alternative use of up to 0.23 ac of Reserve land would not adversely affect any of the activities, features, or attributes of the Reserve that qualify the resource for protection under Section 4(f) and is *de minimis*.

4.1.5 Coordination

Multiple meetings have been held with San Elijo Lagoon stakeholders, including a briefing with the San Elijo Lagoon Conservancy executive director on January 13, 2012; a meeting with CDFW, County of San Diego Department of Parks and Recreation, and the San Elijo Lagoon Conservancy to discuss 4(f) concurrence on April 3, 2013; and a meeting with the County of San Diego Department of Parks and Recreation to discuss 4(f) concurrence on August 1, 2013. Concurrence in a Section 4(f) *de minimis* finding was received from the CDFW on August 30, 2013, from the County of San Diego on September 10, 2013, and from the San Elijo Lagoon



Conservancy on August 12, 2013. Concurrence letters from agencies with jurisdiction are located in Appendix A.

4.2 AGUA HEDIONDA LAGOON

Agua Hedionda Lagoon, located in Carlsbad, is an approximately 400-ac, man-made water body that was constructed in 1954. Agua Hedionda Lagoon, as shown in Figure 19, is surrounded by the Pacific Ocean to the west, undeveloped land to the east, the Encina Power Plant to the south, and residential development to the north. Agua Hedionda Lagoon is connected to the Pacific Ocean through an inlet channel and to Agua Hedionda Creek and its tributaries in the inner lagoon.

Agua Hedionda Lagoon is owned by Cabrillo Power II, a privately owned corporation, who leases the lagoon to the City of Carlsbad to manage recreational and commercial uses. This long-term lease began in 1957, and is to be renewed every 10 years. This agreement turns over operation of the lagoon to the City of Carlsbad, which makes the resource subject to Section 4(f) protection. The City of Carlsbad allows boating and water skiing on the lagoon and the YMCA operates a canoeing center. A white seabass research facility, jointly managed by Hubbs/Seaworld and CDFW, is located at the lagoon, as is a commercial mussel-growing facility. These recreational, research, and commercial activities would not be impacted during construction of the proposed project.

CDFW manages a 186-ac Ecological Reserve consisting of wetlands located at the eastern end of the lagoon (see Figure 19). This ecological Reserve is owned by the CDFW and therefore represents a resource subject to Section 4(f) protection. However, this ecological Reserve is located approximately 3000 ft east of the proposed project. Implementation of the proposed project would not require use of any land within the Agua Hedionda Lagoon CDFW Reserve.

4.2.1 Impacts

Table 5 shows the area of approximate use for Agua Hedionda Lagoon that would be required for each alternative.

Table 5: Area of 4(f) Use for Agua Hedionda Lagoon by Alternative

Agua Hedionda Lagoon Total Area	10+4 Barrier Alternative	10+4 Buffer Alternative	8+4 Barrier Alternative	8+4 Buffer Alternative (Preferred Alternative)
400 ac	3.54 ac	2.00 ac	2.63 ac	1.59 ac



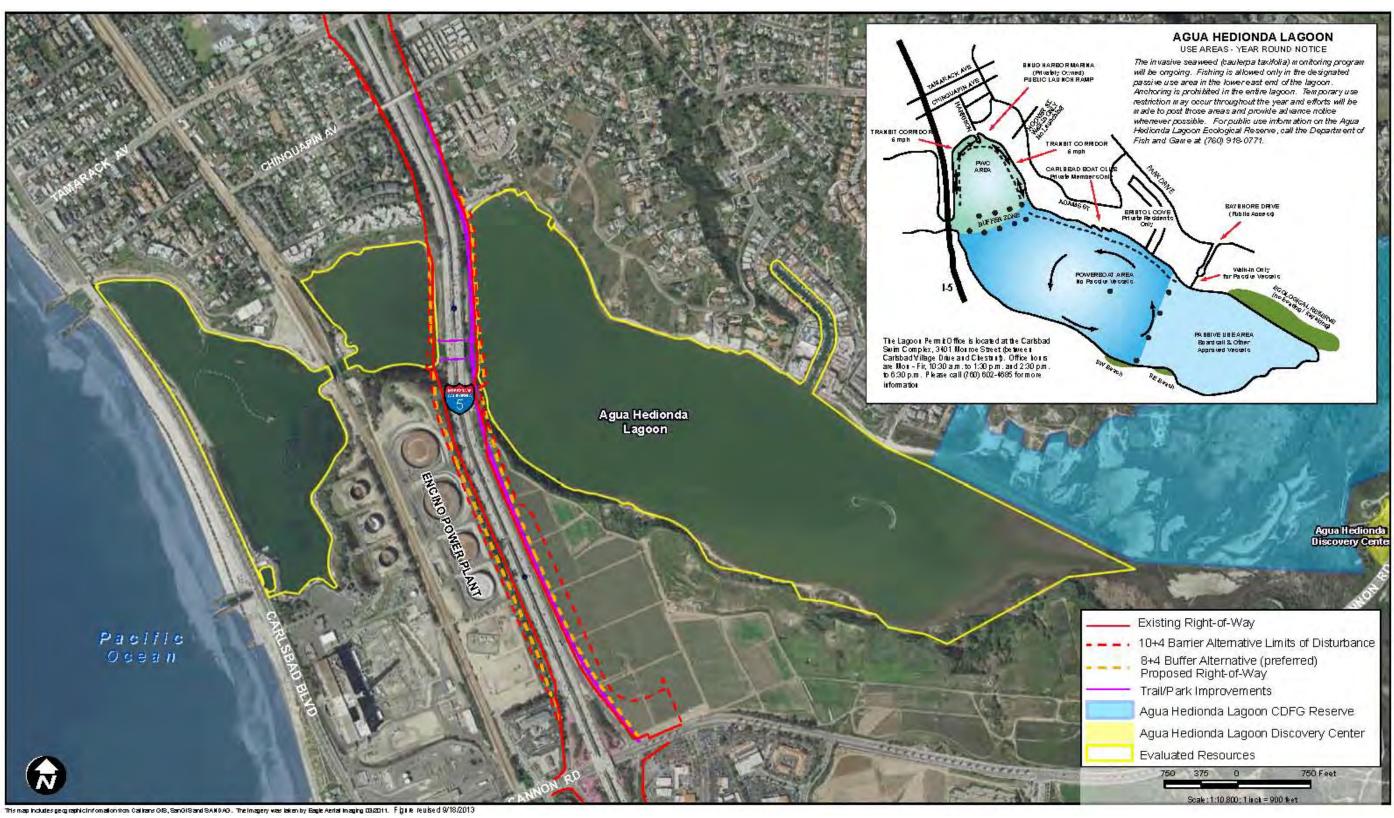


Figure 19: Agua Hedionda Lagoon





Figure 20: Potential Impacts to Agua Hedionda Lagoon



8+4 Buffer Alternative (Preferred Alternative)

Area of Land to Be Used

Implementation of the 8+4 Buffer alternative would require use of approximately 1.59 ac of open water and undeveloped land leased to the City of Carlsbad (Figure 20), which is approximately 0.39 percent of the total area of the 400-ac Agua Hedionda Lagoon (Table 5). This includes the 0.02 ac area required for temporary construction. These minor land uses would not permanently affect any recreation activities at the lagoon, as described below.

Facilities, Functions, and/or Activities Affected

Recreation activities at Agua Hedionda Lagoon include boating, water skiing, and canoeing. Minor uses of open water and undeveloped land associated with the Preferred Alternative would occur at the lagoon's boundary with I-5 and would not affect any of these recreation activities at the lagoon. These uses would also not affect the 186-ac CDFW Ecological Reserve, which is located approximately 3,000 ft east of the proposed project.

Access

Public access to Agua Hedionda Lagoon is provided at Harrison Street and Bayshore Drive. Additional private access points are provided at the Carlsbad Boat Club and Bristol Cove. Implementation of the Preferred Alternative would not affect any of these access points.

Visual Quality

Land used by the Preferred Alternative would not affect the visual quality of Agua Hedionda Lagoon. The areas where land along the edge of I-5 would be used currently consist of open water and undeveloped land at the lagoon's boundary with I-5. The use of small amounts of City leasehold land would simply extend the Caltrans right-of-way boundary outward slightly and ultimately result in a view of the area adjacent to I-5 very similar to the existing condition.

Noise

Existing traffic noise levels adjacent to the freeway are approximately 68 to 70 dBA. Future noise levels at the Lagoon are projected to increase approximately two dBA over a majority of the Lagoon. This two dBA increase would not be perceptible to the human ear (a three dBA increase is barely perceptible the human ear).

Vegetation

Land used by the Preferred Alternative is located where Agua Hedionda Lagoon borders the existing I-5 Caltrans right-of-way and currently consists of open water and undeveloped land. Vegetation in this area consists of eel grass at 0.10 ac, and 4.84 ac disturbed coastal sage scrub, coastal sage scrub, non-native woodland, ornamental, and disturbed habitat. Vegetation to be modified by the proposed project would be mitigated with at least a 1.2:1 ratio for eel grass, 1:1 ratio for disturbed coastal sage scrub, and 2:1 ratio for coastal sage scrub and sensitive upland habitats via habitat restoration/creation ratios agreed upon by the resource agencies as part of the overall mitigation plan for the proposed project.

Wildlife

The majority of Agua Hedionda Lagoon, including the area that would be used by the Preferred Alternative, is managed by the City as a recreation area and does not serve as an ecological reserve or any other type of wildlife preserve. No special status bird species were observed within the I-5 study area around Agua Hedionda Lagoon. The only portion of the lagoon



reserved for wildlife is the 186-ac CDFW Ecological Reserve in the eastern portion of the lagoon. Land use associated with the Preferred Alternative would not affect the CDFW Ecological Reserve. Additionally, the increase in traffic noise levels that would result with the proposed project would not substantially increase the potential for noise to impact sensitive species.

10+4 Barrier Alternative

This alternative would have impacts similar to the refined 8+4 Buffer alternative (Preferred Alternative) with the differences described below.

Area of Land to Be Used

Implementation of the 10+4 Barrier alternative would require use of approximately 3.54 ac of open water and undeveloped land leased to the City of Carlsbad, which is approximately 0.89 percent of the total area of the Agua Hedionda Lagoon (Table 5; Figure 20). Similar to the Preferred Alternative, these minor land uses would not permanently affect any recreation activities at the lagoon. In all other respects, the impacts of this alternative would be identical to those discussed above.

10+4 Buffer Alternative

This alternative would have impacts similar to the refined 8+4 Buffer alternative (Preferred Alternative) with the differences described below.

Area of Land to Be Used

Implementation of the 10+4 Buffer alternative would require use of approximately 2.00 ac of open water and undeveloped land leased to the City of Carlsbad, which is approximately 0.50 percent of the total area of Agua Hedionda Lagoon (Table 5). Similar to the Preferred Alternative, these minor land uses would not permanently affect any recreation activities at the lagoon. In all other respects, the impacts of this alternative would be identical to those discussed above.

8+4 Barrier Alternative

This alternative would have impacts similar to the refined 8+4 Buffer alternative (Preferred Alternative) with the differences described below.

Area of Land to Be Used

Implementation of the 8+4 Barrier alternative would require use of approximately 2.63 ac of open water and undeveloped land leased to the City of Carlsbad, which is approximately 0.66 percent of the total area of Agua Hedionda Lagoon (Table 5). Similar to the Preferred Alternative, these minor land uses would not permanently affect any recreation activities at the lagoon. In all other respects, the impacts of this alternative would be identical to those discussed above.

4.2.2 No Build Alternative

The No Build alternative would not require a use of any portion of Agua Hedionda Lagoon.



4.2.3 Measures to Minimize Harm

The proposed project has been designed in coordination with both State and federal resource agencies through the NEPA/404 Integration Process to minimize impacts, where possible, by reducing the amount of right-of-way and limiting the grading footprint to minimize impacts to natural resources. Coastal sage scrub and disturbed coastal sage scrub to be impacted by the proposed project would be mitigated via habitat restoration/creation at ratios agreed upon by the resource agencies as a part of the overall mitigation plan for the proposed project.

4.2.4 De Minimis Finding

Implementation of the proposed project would not impede the ability of the lagoon to support boating, water skiing, and canoeing recreation. Nor would it affect the 186-ac CDFW Ecological Reserve. Public and private access to the lagoon would not be affected. The proposed project would not interfere with existing trails, or planned trails. The visual character of the lagoon would be unchanged; the use and use of small amounts of City leasehold land would simply extend the Caltrans right-of-way boundary outward slightly and ultimately result in a view of the area adjacent to I-5 very similar to the existing condition. Increases in noise levels would not be noticeable to lagoon users. Areas of natural vegetation disturbed through construction would be restored with native plant species. Wildlife, air quality, and water quality would remain similar to the existing conditions. In fact for water quality, there is a benefit by increasing for the maximum tidal range at 8.38 feet and maximum phase lag at 80.1 minutes.

4.2.5 **Coordination**

It is expected that any build alternative use of the lagoon, especially use of approximately 1.6 ac that would occur for the refined 8+4 Buffer alternative (Preferred Alternative), would not adversely affect any of the activities, features, or attributes of the publicly owned open regional open space park that qualify the resource for protection under Section 4(f), and is *de minimis*. Concurrence in a Section 4(f) *de minimis* finding was received from the City of Carlsbad on May 6, 2013.

4.3 HISTORIC PROPERTIES

Several Historic Property Survey Reports (HPSRs) and Finding of Effects (2007 and 2013 FOE) were prepared by Caltrans to evaluate the potential for a Section 4(f) use of historic resources. The HPSRs were based on archaeological and architectural surveys conducted to identify properties within the project area that may be eligible for listing in the National Register of Historic Places (National Register), in compliance with Section 106 of the National Historic Preservation Act, CEQA, and Section 5024 of the California Public Resources Code. The FOEs discussed the project's effect on those eligible resources in compliance with these same laws and determined if and/or what type of 4(f) use would occur.

One National Register site, 767 Orpheus Avenue, is being impacted by the project and is a sliver take. This resulted in a No Adverse Effect.



The 2013 FOE identifies one historic property (one architectural resource with contributing landscape features) that is eligible for listing in the National Register. This property is discussed below, because there remains a use that triggered Section 4(f). A second property identified in the 2007 FOE is not proposed for use, because the abatement for the sensitive receptor is no longer a recommended soundwall constructed by the proposed project.

4.3.1 Impacts

All of the build alternatives are included in the discussion below because almost the same area of use for this property would be required for all the build alternatives.

Land Use

Implementation of the proposed project would require the use of an historic property with one architectural resource with contributing landscape features eligible for listing in the National Register (refer to Section 3.8 of the Final EIR/EIS for more specific information regarding this property). The property's eligibility for listing in the National Register qualifies this resource as subject to protection under Section 4(f). The architectural resource meets National Register Criterion C at the local level of significance as distinctive examples of its style and period, and as one of the most architecturally distinguished residences in Encinitas. The residence's property boundaries coincide with the current parcel boundaries, and contributing features include the house, garage, and the row of palm trees at the west end of the front yard.

Implementation of the proposed project would have no adverse effect on the qualities of the property that make it eligible for listing in the National Register. The use of the property would result from a partial take that would result in the loss of some vegetation/landscaping and outbuildings at the east end of the parcel. It would not affect any of the qualities that make the property eligible, as no contributing buildings, landscaping, or other contributing features would be impacted. This type of effect is called a No Adverse Effect, because the qualities that make the resource eligible would not be adversely affected. Almost the same area of use for this property would be required for all the build alternatives.

Caltrans notified FHWA and SHPO that the project's "Effects" for this property was "Not Adverse" due to minimal impacts that would not affect those qualities that contribute to the property's eligibility. On March 17, 2008, SHPO stated that the treatment of this historic property in the FOE was reasonable (see Final EIR/EIS *Figure 5-5.6*).

In a letter addressed to FHWA dated July 1, 2013, Caltrans requested FHWA's review and concurrence with the Finding of No Adverse Effect and properly notified FHWA and SHPO of the de minimis determination for this property (see Final EIR/EIS *Figure 5-5.8*). FHWA sent a letter to SHPO on this matter on July 12, 2013 in which FHWA notified SHPO of APE revisions and requested SHPO concurrence with the Finding of No Adverse Effect (see Final EIR/EIS *Figure 5-5.9*) On September 11, 2013, SHPO concurred with the Finding of No Adverse Effect without standard conditions (see Final EIR/EIS *Figure 5-5.10*).

4.3.2 **Avoidance Alternatives**

The No-Build Alternative would not require a use of this historic property.



4.3.3 Measures to Minimize Harm

The proposed project has been designed to minimize impacts and use, where possible, by reducing the amount of new right-of-way and limiting the grading footprint to minimize impacts to resources. No additional mitigation is required for this property.

4.3.4 <u>De Minimis Finding</u>

Impacts associated with the proposed project would not adversely affect any of the activities, features, or attributes that qualify this historic property for protection under 4(f), and is *de minimis*.







CHAPTER 5.0 – REFERENCES

Ahmad, Fatima

2008 Personal communication. Administrative Secretary, Palmquist Elementary School. October 23.

Allen, Lori

2008 Personal communication. Administrative Secretary, South Oceanside Elementary School and Park. October 22.

Arnold, Dana

2008 Personal communication. School Office Assistant, Del Mar Heights Elementary School. October 20.

Avanzino, Dana

2008 Personal communication. School Office Assistant, Del Mar Hills Academy. October 20.

Barnett, Carla

2008 Personal communication. School Secretary, St Patrick's Catholic School. October 22.

Batiquitos Lagoon Foundation

2006 Available at http://www.batiquitosfoundation.org/locadesc.htm. Accessed 8/30/06.

Buena Vista Audubon

2006 Available at http://www.bvaudubon.org/. Accessed 8/31/06.

Burke, Tina

2008 Personal communication. Headmaster's Assistant, Santa Fe Christian School. October 20.

Busch Gardens

2006 Available at

http://www.buschgardens.org/swc/wetlands/sd_county_wetlands/agua_hedionda_lagoon.htm. Accessed 8/31/06.

California Department of Transportation (Caltrans)

2008 Noise Study Report.

City of Carlsbad

2007 City of Carlsbad Parks & Park Planning Department website. Available at http://www.carlsbadca.gov/parks/recmaps.html. Accessed 6/26/07.



City of San Diego

1979 Process Guide and General Plan.

1997 City of San Diego MSCP Subarea Plan, March.

County of San Diego

2004 Personal communication with Susan Welker. July 13.

Delanty, Lois

2008 Personal communication. Administrative Assistant, San Dieguito High School. October 21.

Drawbaugh, Sally

2008 Personal communication. School Secretary, Buena Vista Elementary School. October 22.

EDAW Inc.

2006 Noise Report for Sensitive Wildlife Receptors within the I-5 North Coast Project. September.

2008 Hall Property Community Park Draft Program Environmental Impact Report. Prepared for the City of Encinitas.

Federal Highway Administration (FHWA)

2005 FHWA Section 4(f) Policy Paper, March 1.

Frank, Shelia

2008 Personal communication. Clerk/Aide, Ada Harris Elementary School. October 21.

Gonzalez. Veronica

2008 Personal communication. School Services Secretary, Capri Elementary School.

Grossman, Nalani

2008 Personal communication. School Office Assistant, Torrey Hills School. October 20.

Hutchinson, Martha

2008 Personal communication. Office Assistant, Earl Warren Middle School. October 21.

Juarez, Anita

2008 Personal communication. Office Assistant, Oceanside High School. October 23.

Krosch, Jeanne

2009 Personal communication. City of San Diego Planning Department. February 3.

Lamb, Jill

2008 Personal communication. Secretary, Solana Vista Elementary School. October 21.



Myer, Kathy

2008 Personal communication. Administrative Assistant, Skyline Elementary School. October 21.

Navarro, Claudia

2008 Personal communication. School Services Secretary, Paul Ecke Central Elementary School. October 21.

Schmedding, Kathy

2008 Personal communication. Secretary, Solana Highlands Elementary School. October 20.

Sobieski, Luanne

2008 Personal communication. Secretary, St James Academy. October 20.

Southern California Edison (SCE)

2006 Available at http://www.sce.com/PowerandEnvironment/PowerGeneration/Marine Mitigation/SanDieguitoLagoonRestoration.htm. Accessed 8/30/06.

U.S. Fish and Wildlife Service / San Dieguito River Park Joint Powers Authority (USFWS/SDRPJPA)

2000 EIR/EIS for the San Dieguito Wetland Restoration Project Volume 2.

Villamar, Ofelia

2008 Personal communication. Office Assistant, Jefferson Elementary School. October 22.

Zielinski, Becky

2008 Personal communication. Administrative Secretary, Laurel Elementary School. October 23.







Appendix A1

Correspondence and Concurrence with Agencies of Jurisdiction



Information for the Reader

This appendix contains letters of coordination with agencies having jurisdiction over Section 4(f) resource(s) for which potential use could occur. The letters provided by Caltrans describe the property crossed and the level of effect associated with implementation of the 8+4 Buffer alternative (Preferred Alternative). Written concurrence on FHWA's impact assessment is requested, as required under Section 4(f) (49 USC 303[d]; 23 USC 138[d]). The *de minimis* determinations were prepared in consultation with the agencies having jurisdiction over the resources and centered on a) significance of the property, b) primary purpose of the land, c) proposed use and impacts, and d) proposed measures to avoid and/or minimize harm.

The letters below include both correspondence from Caltrans to the agencies, as well as from the agencies to Caltrans regarding concurrence with FHWA's assessment of *de minimis* impacts. A *de minimis* impact finding is made when the project would not adversely affect the activities, features, or attributes qualifying the properties for Section 4(f) protection.



TABLE OF CONTENTS

<u>Title</u>	<u>Page</u>
Information for the Reader	. AA-2
Letter from Caltrans to the City of Carlsbad with Concurrence Documentation	. AA-5
Letter from Caltrans to the California Department of Fish and Wildlife with Concurrence Documentation	AA-11
Letter from Caltrans to the County of San Diego, Parks and Recreation with Concurrence Documentation	AA-17
Letter from Caltrans to the San Elijo Lagoon Conservancy with Concurrence Documentation	AA-27







STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 11 4050 TAYLOR STREET, M.S. 242 SAN DIEGO, CA 92110 PHONE (619) 688-0100 FAX (619) 688-4237 TTY 711 www.dot.ca.gov



April 30, 2013

11-SD-5 PM; R28.4 to R55.4 EA: 235800 (1100000159) SCH#: 2004101076

Mr. Skip Hammann Public Works Director City of Carlsbad 1635 Faraday Avenue Carlsbad, CA 92008

Dear Mr. Hammann:

RE: Agua Hedionda Lagoon Potential Impacts with I-5 NCC Project

The California Department of Transportation (Caltrans) District 11 on behalf of the Federal Highway Administration (FHWA) is seeking written concurrence for potential use of a portion of Agua Hedionda Lagoon within the City of Carlsbad along Interstate 5 (I-5), that potential use of park land would not alter the functions of this recreational facility.

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966 states that a policy of the United States Government is that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. FHWA and Caltrans have concluded that the Agua Hedionda Lagoon warrants protection under Section 4(f) as it is a publicly accessed and publicly leased recreation area.

FHWA and Caltrans have prepared a Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) and a Supplemental Draft Environmental Impact Report/Environmental Impact Statement (Supplemental Draft EIR/EIS) for the proposed I-5 North Coast Corridor Project (I-5 NCC Project). FHWA and Caltrans propose improvements to maintain or improve the existing and future traffic operations on the existing I-5 freeway from La Jolla Village Drive in San Diego to Harbor Drive in Oceanside/Camp Pendleton, extending approximately 27 miles (PM R28.4 to R55.4) along I-5. Impacts to Agua Hedionda Lagoon were discussed in Appendix A: Resources Evaluated Relative to the Requirements of Section 4(f).

In July 2011, Caltrans identified the 8+4 Buffer Alternative (I-5 Express Lanes) as the Locally Preferred Alternative (LPA). The LPA consists of two high-occupancy vehicle (HOV)/Managed Lanes in each direction, separated by a buffer from the existing four general purpose lanes in each direction.



Mr. Skip Hammann April 30, 2013 Page 2

APPLICABILITY OF SECTION 4(f)

Section 4(f) legislation allows the USDOT to determine that certain uses of a Section 4(f) land would have no adverse effect on the protected resource. Such *de minimis* impacts on publicly owned parks; recreational areas of national, state or local significance; wildlife or waterfowl refuges; or lands from a historic site of national, state or local significance are defined as those that do not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) (49 USC 303[d]; 23 USC 138[d]). When FHWA proposes to make a *de minimis* impact finding, it must provide an opportunity for public comment on the proposed finding (this was included in the public comment period for the I-5 NCC Project Draft EIR/EIS). In addition, the official(s) with jurisdiction over the Section 4(f) resource in question must concur, in writing, with the finding of Caltrans and FHWA in the case of parks, recreation areas, and wildlife and waterfowl refuges, that the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection (23 CFR § 774.5[b]).

DESCRIPTION OF AGUA HEDIONDA LAGOON WITHIN THE PROJECT BOUNDARY

Agua Hedionda Lagoon, located in Carlsbad, is an approximately 162-ha (400-ac), man-made water body that was constructed in 1954. Agua Hedionda Lagoon, as shown in Figure 15, is surrounded by the Pacific Ocean to the west, undeveloped land to the east, the Encina Power Plant to the south, and residential development to the north. Agua Hedionda Lagoon is connected to the Pacific Ocean through an inlet channel, and to Agua Hedionda Creek and its tributaries in the inner lagoon.

Agua Hedionda Lagoon is owned by Cabrillo Power II, a privately owned corporation, who leases the lagoon to the City of Carlsbad to manage recreational and commercial uses. This long-term lease began in 1957, and is to be renewed every ten years. This agreement turns over operation of the lagoon to the City of Carlsbad, which makes the resource subject to Section 4(f) protection. The City of Carlsbad allows boating and water skiing on the lagoon, and the YMCA operates a canoeing center. A white seabass research facility, jointly managed by Hubbs/Seaworld and California Department of Fish and Wildlife (CDFW), is located at the lagoon, as is a commercial mussel-growing facility. These recreational, research, and commercial activities would not be impacted during construction of the proposed project.

CDFW manages a 75-ha (186-ac) Ecological Reserve consisting of wetlands located at the eastern end of the lagoon (see Figure 15). This Ecological Reserve is owned by the State of California; however, this Ecological Reserve is located approximately 914 m (3,000 ft.) east of the proposed project. Implementation of the proposed project would not require use of any land within the Agua Hedionda Lagoon CDFW Reserve.



Mr. Skip Hammann April 30, 2013 Page 3

Impacts with 8+4 with Buffer Alternative (Locally Preferred Alternative)

Per the 2050 Regional Transportation Plan, implementation of the 8+4 with Buffer Alternative north of Palomar Airport Road would occur between years 2030 to 2035. This phase includes the Agua Hedionda bridge replacement and I-5 North Coast (NC) Bike Trail. Permanent impacts from these improvements would use approximately 0.64 ha (1.59 ac) with 0.001 ha (.02 ac) for a temporary construction easement. The temporary construction easement enables improvements that avoid further use of the lagoon. The area for use would be of open water and undeveloped land leased to the City of Carlsbad, which is approximately 1.1% of the total area of Agua Hedionda Lagoon. These minor land uses would not alter or affect any recreation activities at the lagoon. Coordination with the City will continue to clarify the proposed use of the lagoon and adjacent areas by the proposed project.

Proposed De Minimis Finding

Implementation of the proposed project would not impede the ability of the lagoon recreation for boating, water skiing, and canoeing. Public and private access to the lagoon would not be affected. The proposed project would not interfere with existing or planned trails and instead provides an opportunity to enhance and connect with them. The visual character of the lagoon would not be adversely changed; the use of small amounts of City leasehold land would simply extend the Caltrans right-of-way boundary outward slightly, and would ultimately result in a view of the area adjacent to I-5 as similar to the existing condition. Increases in noise levels would not be noticeable to lagoon users. With the project, future noise levels at the lagoon are projected to increase approximately 2 dBA over a majority of the lagoon. This 2 dBA increase would not be perceptible to the human ear. The increase also would not substantially increase the potential for noise to impact sensitive species.

Areas of natural vegetation disturbed through construction would be restored with native plant species and mitigated at ratios agreed upon by the resource agencies as part of the overall mitigation plan for the proposed project.

Overall, it is expected that use of 0.64 ha (1.59 ac) with 0.001 ha (.02 ac) for a temporary construction easement of the lagoon would not adversely affect any of the activities, features, or attributes of the publicly owned regional open space park that qualify the resource for protection under Section 4(f), and is proposed as *de minimis*.



Mr. Skip Hammann April 30, 2013 Page 4

Coordination between Caltrans/FHWA and the City of Carlsbad

In the City of Carlsbad comment letters dated November 22, 2010 and October 12, 2012 on the Draft EIR/EIS and Supplemental Draft EIR/EIS (respectively), the City commented on the trails for Agua Hedionda Lagoon and stated that east/west crossing at both bridge abutments are critical for connectivity for trails, including the Coastal Rail Trail. Caltrans will incorporate "Potential Future Pedestrian/Bike Trail and Wildlife Benches" next to the north and south abutments of the Agua Hedionda bridge. Caltrans on behalf of FHWA is continuing the coordination with the City of Carlsbad. Caltrans and the City met on February 15, 2013, and had a teleconference on March 28, 2013.

Since the project design is still in the preliminary phases, further coordination with the City of Carlsbad will occur regarding the following:

- Visual changes resulting from implementation of the LPA, including the Agua Hedionda bridge replacement, I-5 NC Bike Trail, and the proposed retaining wall for this bike trail.
- How the I-5 NC Bike Trail would connect with the planned east-west trails under and east
 of I-5 to enable travel between inland areas and the beach.
- How to best design the LPA, including the Agua Hedionda bridge replacement and the I-5 NC Bike Trail, to avoid and/or reduce impacts to the Foxes lift station.
- How to best enhance the nearby recreation uses and public use of the lagoon and trails.
- Consideration of pets on proposed lagoon trails.

Furthermore, Caltrans acknowledges the City may identify other concerns besides those listed above, particularly since construction of the LPA in the vicinity of the lagoon is not scheduled until 2030 at the earliest. For that reason, Caltrans agrees to continue its coordination efforts with the City into the future.

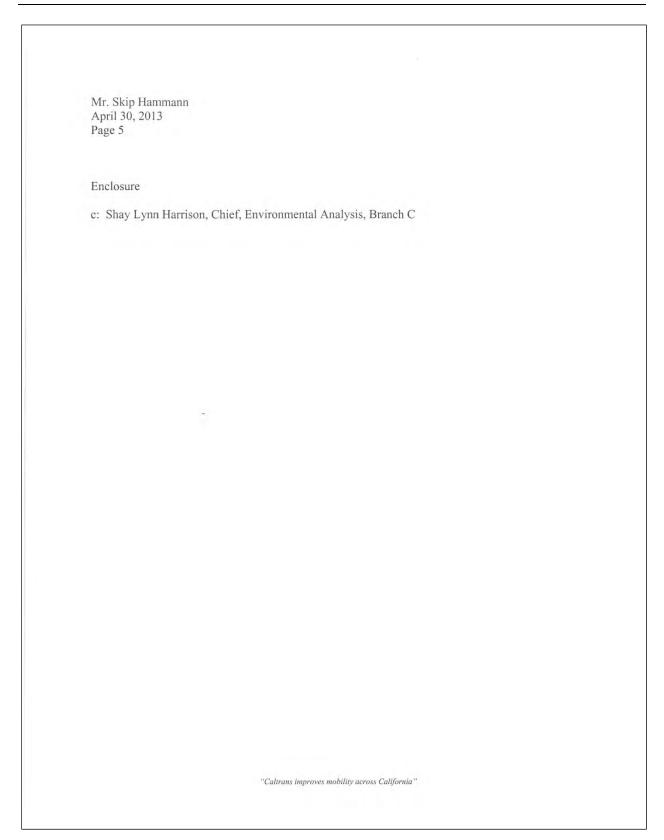
Caltrans is now requesting your written concurrence in this *de minimis* determination, as required under Section 4(f) (49 USC 303[d]; 23 USC 138[d]). A signature block is provided at the bottom of this letter for your convenience. If you have any questions, please contact Shay Lynn Harrison, Chief, Environmental Analysis, Branch C, at (619) 688-0190.

Sincerely,

BRUCE L. APRIL

Deputy District Director, Environmental







City of Carlsbad Concurrence with *De Minimis* Impact Finding for Agua Hedionda Lagoon

The signature below represents written concurrence on the *de minimis* impact finding that the proposed Interstate 5 North Coast Corridor Project 8+4 Buffer Alternative would not adversely affect the activities, features, and attributes that qualify the property, Agua Hedionda Lagoon, for protection under Section 4(f) within the City of Carlsbad.

Mr. Skip Hammann Public Works Director City of Carlsbad



STATE OF CALIFORNIA-BUSINESS TRANSPORTATION AND HOUSING AGENCY

EDMIND G. BROWN Is Engence

DEPARTMENT OF TRANSPORTATION

DISTRICT 11 4050 TAYLOR STREET, M.5, 242 SAN DIEGO, CA 92110 PHONE (619) 688-0100 FAX (619) 688-237 TTY 711 WWW.dot.ca.gov



August 27, 2013

11-SD-5 PM: R28.4 to R55.4 EA: 235800 (1100000159) SCH#: 2004101076

Mr. Edmund Pert California Department of Fish & Wildlife South Coast Region 5 3883 Ruffin Road San Diego, CA 92123

Dear Mr. Pert:

RE: San Elijo Lagoon Potential Impacts with I-5 NCC Project

The California Department of Transportation (Caltrans) District 11, on behalf of the Federal Highway Administration (FHWA), is seeking written concurrence for potential use of a portion of the San Elijo Lagoon Ecological Reserve within the City of Encinitas along Interstate 5 (I-5) that potential use of reserve land would not alter the functions of this ecological reserve.

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966 states that a policy of the United States Government is that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. These requirements are now codified at 49 U.S.C. § 303 and 23 U.S.C. § 138. FHWA and Caltrans have concluded that the San Elijo Lagoon warrants protection under Section 4(f) as it is a publicly accessed and publicly leased recreation area.

FHWA and Caltrans have prepared a Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) and a Supplemental Draft Environmental Impact Report/Environmental Impact Statement (Supplemental Draft EIR/EIS) for the proposed I-5 North Coast Corridor Project (I-5 NCC Project). FHWA and Caltrans propose improvements to maintain or improve the existing and future traffic operations on the existing I-5 freeway from La Jolla Village Drive in San Diego to Harbor Drive in Oceanside/Camp Pendleton, extending approximately 27 miles (PM R28.4 to R55.4) along I-5. Impacts to San Elijo Lagoon were discussed in Appendix A: Resources Evaluated Relative to the Requirements of Section 4(f).

In July 2011, Caltrans identified the 8+4 Buffer Alternative (I-5 Express Lanes) as the Locally Preferred Alternative (LPA). The LPA consists of two high-occupancy vehicle (HOV)/Managed Lanes in each direction, separated by a buffer from the existing four general purpose lanes in each direction.



APPLICABILITY OF SECTION 4(f)

Section 4(f) allows the USDOT to determine that certain uses of a Section 4(f) land would have no adverse effect on the protected resource. Such de minimis impacts on publicly owned parks; recreational areas of national, state or local significance; wildlife or waterfowl refuges; or lands from a historic site of national, state or local significance are defined as those that do not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) (49 U.S.C. 303[d]; 23 U.S.C. 138). When FHWA proposes to make a de minimis impact finding, it must provide an opportunity for public comment on the proposed finding (this was included in the public comment period for the I-5 NCC Project Draft EIR/EIS). In addition, the official(s) with jurisdiction over the Section 4(f) resource in question must concur, in writing, with the finding of Caltrans and FHWA (in the case of parks, recreation areas, and wildlife and waterfowl refuges) that the project would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection (23 CFR § 774.5[b]).

SAN ELIJO LAGOON ECOLOGICAL RESERVE

The San Elijo Lagoon Ecological Reserve is located within the cities of Encinitas and Solana Beach and extends inland to the community of Rancho Santa Fe. The Reserve is bordered by the Pacific Ocean to the west, and a mix of residential and undeveloped land to the east, north, and south. The entire Reserve is approximately 1,000 acres (ac) in size. It is primarily a shallow-water estuary fed by a 77-miles squared (mi²) watershed with two main tributaries, Escondido Creek and La Orilla Creek, and is divided into a west, central, and eastern basin by Highway 101, the railway, and I-5. It contains a diverse habitat with six plant communities including coastal strand, salt marsh, freshwater marsh, riparian scrub, coastal sage scrub, and mixed chaparral. The habitat supports a variety of plant and wildlife species.

The Reserve is owned jointly by the California Department of Fish and Wildlife (CDFW), the County of San Diego Department of Parks and Recreation (DPR) and the San Elijo Lagoon Conservancy (SELC). All three agencies have an agreement to operate San Elijo Lagoon as a State Ecological Reserve under the administration of the DPR. The boundary of the Reserve is contiguous with Caltrans right-of-way where I-5 separates the eastern and central basins. The Reserve includes over 8 km (7 mi) of hiking trails open to the public. These trails can be reached from the north end of Rios Avenue, Holmwood Lane, Solana Hills Drive, Santa Inez Drive, Santa Carina Drive, and Santa Helena Drive on the south side of the lagoon in Solana Beach, and along El Camino Real at La Orilla Creek in the community of Rancho Santa Fe at the east end.

California imprimes mobility across California



The trails are designated for hiking-only in the Central Basin, and both equestrian and hiking in East Basin. The multi-use trail system is restricted to the East Basin, as the riprap slope protection under the I-5 bridge at Manchester Avenue prevents equestrian passage into the West Basin. A Nature Center, located at 2710 Manchester Avenue in Encinitas on the northwest side of the Reserve, provides county ranger offices, museum-quality exhibits, an observation deck. tables and chairs, a parking lot, restrooms, drinking water, and a 1 mile loop trail.

Visitor usage of the Reserve is estimated between 100,000 to 120,000 visitor use days per year (entry onto the Reserve is equal to one visitor use per day). The Nature Center visitor usage is approximately 55,000 to 65,000 visitor use days per year. Visitors are primarily residents of the surrounding neighborhoods, and jogging is popular along the southern trails. School field trips are held at the Nature Center as well as the Rios and Santa Carina trailheads. The park's status as a publicly owned ecological Reserve and recreation area qualifies the Reserve as a resource subject to protection under Section 4(f).

Impacts with 8+4 with Buffer Alternative (Locally Preferred Alternative)

Per the 2050 Regional Transportation Plan, implementation of the 8+4 with Buffer Alternative within the San Elijo Lagoon would occur between years 2015 to 2020. This phase includes the San Elijo bridge replacement, I-5 North Coast (NC) Bike Trail, and proposed Community Enhancement trails. See the enclosure. Permanent impacts from these improvements would use approximately 0.23 acres with 0.56 acres of temporary impacts for a temporary construction easement. At project completion, the temporary construction easement would re-establish the maintenance and pedestrian trail. The total area for use consists of degraded coastal sage scrub habitat, and is approximately 0.079% of the total Reserve area. Approximately 0.61 ac of this use would occur on property owned by the County of San Diego, while the remaining 0.18 ac would occur on property owned by the CDFW. See the enclosed figure. These minor land uses would not alter or affect any recreation activities at the lagoon. Coordination with the CDFW, DPR, and the SELC will continue to clarify the proposed use.

Proposed De Minimis Finding

Under any I-5 NCC Project alternative, the quantity of Reserve land proposed for use is extremely small at 0.79 acres. Access to existing trailheads and designated trails would remain open, and after project implementation would be enhanced. The visual character of the Reserve would not be measurably altered by the freeway widening. The existing noise levels in the Reserve range from 60 dBA to 67 dBA. With the project, future noise levels at the Reserve are projected to increase approximately 1 dBA from the existing noise levels. This 1 dBA increase would not be perceptible to the human ear. The increase in noise would not substantially



increase the potential for noise to impact sensitive species. Therefore, increases in traffic-related noise would not be noticeable to park users and would not impair the wildlife habitat functions of the Reserve.

Areas of natural vegetation disturbed through construction would be restored with native plant species and mitigated at ratios agreed upon by the resource agencies as part of the overall mitigation plan for the proposed project. In recognition of the unique opportunities and value of comprehensive lagoon restoration activities for corridor lagoons, the mitigation plan called the Resource Enhancement Mitigation Program (REMP) includes large-scale lagoon ecosystem restoration and enhancement mitigation opportunities, which will result in significant ecological lift to the lagoon system. The mitigation opportunity includes potential funding for a large-scale lagoon restoration program in full for San Elijo Lagoon, which would be in addition to funds already contributed to previous and ongoing planning and technical evaluation activities necessary to facilitate and implement these lagoon restoration programs. Large-scale lagoon restoration in San Elijo Lagoon may include, but is not limited to, enhancement and restoration (both types) of wetland and other aquatic resources in the associated Lagoons. The intent of the large-scale lagoon restoration funding is to improve the ecological health and hydrological connectivity and to enhance critical coastal resources and habitats. The degraded upland coastal sage community located within the area for de minimis is currently included within the mitigation plan. The upland habitat would be mitigated outside of the lagoon at Dean and Deer Canyon mitigation sites.

Overall, it is expected that use of up to 0.23 acres for a permanent impact and 0.56 ac for a temporary construction easement of Reserve land would not adversely affect any of the activities, features, or attributes of the Reserve that qualify the resource for protection under Section 4(f) and is proposed as de minimis.

Coordination between Caltrans/FHWA and the California Department of Fish and Wildlife

In correspondence received from the CDFW during the public comment period for the Draft Environmental Impact Report / Environmental Impact Statement for the Interstate 5 North Coast Corridor Project and the comment period for the Supplemental Draft Environmental Impact Report / Environmental Impact Statement for the Interstate 5 North Coast Corridor Project, the CDFW did not protest regarding the do minimis findings made by Caltrans/FHWA.



On April 3, 2013, Caltrans, on behalf of FHWA, met with CDFW, DPR, and SELC.

Since the project design is still in the preliminary phases, further coordination with the CDFW, DPR, and SELC will occur regarding the following:

- Continuing discussions on separation between pedestrians and bicyclists.
- Ensuring that access control coordination for signage and gates within the Reserve is continued. In particular, Solana Hills Drive and the NC Bike Trail.
- Continuing discussions in which existing trails should be tied into the bench trail under the south abutment.
- Continuing discussions to ensure trails and maintenance roads are open for use during construction.
- Working with all stakeholders on design details (fencing, retaining walls, signage, access, payement surface, plants, and maintenance).
- Providing information on the cut and fill volumes associated with impacts to San Elijo triggered by Section 4(f).
- · Continuing discussions regarding right-of-way exchange.

Furthermore, Caltrans acknowledges the CDFW, DPR, and SELC may identify other concerns besides those listed above. For that reason, Caltrans looks forward to continued coordination throughout the project lifecycle.

Caltrans is now requesting your written concurrence in this *de minimis* determination, as required under Section 4(f) (49 USC 303[d]; 23 USC 138[d]). A signature block is provided at the bottom of this letter for your convenience. If you have any questions, please contact Shay Lynn Harrison, Chief, Environmental Analysis, Branch C, at (619) 688-0190.

Sincerely,

BRUCE L. APRIL

Deputy District Director, Environmental

Enclosure

c: Shay Lynn M. Harrison, Chief, Environmental Analysis, Branch C

Calirana imprimes mobility across California



California Department of Fish & Wildlife Service Concurrence with De Minimis Impact Finding for San Elijo Lagoon Reserve The signature below represents written concurrence on the de minimis impact finding that the proposed interstate 5 North Coast Corridor Project 8+4 Buffer Alternative would not adversely affect the activities, features, and attributes that qualify the property, San Elijo Lagoon, for protection under Section 4(f) within the City of Encinitas. Mr. Edmund Pert Regional Manager California Department of Fish & Wildlife South Coast Region 5 "Caltrans improves mobility across California"



STATE OF CALIFORNIA .- CALIFORNIA STATE TRANSPORTATION AGENCY.

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 11 4050 TAYLOR STREET, M.S. 242 SAN DIEGO, CA 92110 PHONE (619) 688-0100 FAX (619) 688-4237 TTY 711 www.dolca.gov



Flex your power Be energy efficient

August 1, 2013

11-SD-5 PM: R28 4 t

PM: R28.4 to R55.4 EA: 235800 (1100000159) SCH#: 2004101076

Mr. Brian Albright, Director County of San Diego Department of Parks and Recreation 5500 Overland Avenue, Suite 410 San Diego, CA 92123

Dear Mr. Albright:

RE: San Elijo Lagoon Potential Impacts with I-5 NCC Project

The California Department of Transportation (Caltrans) District 11, on behalf of the Federal Highway Administration (FHWA), is seeking written concurrence for potential use of a portion of the San Elijo Lagoon Ecological Reserve within the City of Encinitas along Interstate 5 (I-5) that potential use of reserve land would not alter the functions of this ecological reserve.

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966 states that a policy of the United States Government is that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. These requirements are now codified at 49 U.S.C. § 303 and 23 U.S.C. § 138. FHWA and Caltrans have concluded that the San Elijo Lagoon warrants protection under Section 4(f) as it is a publicly accessed and publicly leased recreation area.

FHWA and Caltrans have prepared a Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) and a Supplemental Draft Environmental Impact Report/Environmental Impact Statement (Supplemental Draft EIR/EIS) for the proposed I-5 North Coast Corridor Project (I-5 NCC Project). FHWA and Caltrans propose improvements to maintain or improve the existing and future traffic operations on the existing I-5 freeway from La Jolla Village Drive in San Diego to Harbor Drive in Oceanside/Camp Pendleton, extending approximately 27 miles (PM R28.4 to R55.4) along I-5. Impacts to San Elijo Lagoon were discussed in Appendix A: Resources Evaluated Relative to the Requirements of Section 4(f).



In July 2011, Caltrans identified the 8+4 Buffer Alternative (I-5 Express Lanes) as the Locally Preferred Alternative (LPA). The LPA consists of two high-occupancy vehicle (HOV)/Managed Lanes in each direction, separated by a buffer from the existing four general purpose lanes in each direction.

APPLICABILITY OF SECTION 4(f)

Section 4(f) allows the USDOT to determine that certain uses of a Section 4(f) land would have no adverse effect on the protected resource. Such *de minimis* impacts on publicly owned parks; recreational areas of national, state or local significance; wildlife or waterfowl refuges; or lands from a historic site of national, state or local significance are defined as those that do not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) (49 U.S.C. 303[d]; 23 U.S.C. 138). When FHWA proposes to make a *de minimis* impact finding, it must provide an opportunity for public comment on the proposed finding (this was included in the public comment period for the I-5 NCC Project Draft EIR/EIS). In addition, the official(s) with jurisdiction over the Section 4(f) resource in question must concur, in writing, with the finding of Caltrans and FHWA (in the case of parks, recreation areas, and wildlife and waterfowl refuges) that the project would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection (23 CFR § 774.5[b]).

SAN ELIJO LAGOON ECOLOGICAL RESERVE

The San Elijo Lagoon Ecological Reserve is located within the cities of Encinitas and Solana Beach and extends inland to the community of Rancho Santa Fe. The Reserve is bordered by the Pacific Ocean to the west, and a mix of residential and undeveloped land to the east, north, and south. The entire Reserve is approximately 1,000 acres (ac) in size. It is primarily a shallow-water estuary fed by a 77-miles squared (mi²) watershed with two main tributaries, Escondido Creek and La Orilla Creek, and is divided into a west, central, and eastern basin by Highway 101, the railway, and I-5. It contains a diverse habitat with six plant communities including coastal strand, salt marsh, freshwater marsh, riparian scrub, coastal sage scrub, and mixed chaparral. The habitat supports a variety of plant and wildlife species.

The Reserve is owned jointly by the California Department of Fish and Wildlife (CDFW), the County of San Diego Department of Parks and Recreation (DPR) and the San Elijo Lagoon Conservancy (SELC). All three agencies have an agreement to operate San Elijo Lagoon as a State Ecological Reserve under the administration of the DPR. The boundary of the Reserve is contiguous with Caltrans right-of-way where I-5 separates the eastern and central basins.



The Reserve includes over 8 km (7 mi) of hiking trails open to the public. These trails can be reached from the north end of Rios Avenue, Holmwood Lane, Solana Hills Drive, Santa Inez Drive, Santa Carina Drive, and Santa Helena Drive on the south side of the lagoon in Solana Beach, and along El Camino Real at La Orilla Creek in the community of Rancho Santa Fe at the east end. The trails are designated for hiking-only in the Central Basin, and both equestrian and hiking in East Basin. The multi-use trail system is restricted to the East Basin, as the riprap slope protection under the I-5 bridge at Manchester Avenue prevents equestrian passage into the West Basin. A Nature Center, located at 2710 Manchester Avenue in Encinitas on the northwest side of the Reserve, provides county ranger offices, museum-quality exhibits, an observation deck, tables and chairs, a parking lot, restrooms, drinking water, and a 1 mile loop trail.

Visitor usage of the Reserve is estimated between 100,000 to 120,000 visitor use days per year (entry onto the Reserve is equal to one visitor use per day). The Nature Center visitor usage is approximately 55,000 to 65,000 visitor use days per year. Visitors are primarily residents of the surrounding neighborhoods, and jogging is popular along the southern trails. School field trips are held at the Nature Center as well as the Rios and Santa Carina trailheads. The park's status as a publicly owned ecological Reserve and recreation area qualifies the Reserve as a resource subject to protection under Section 4(f).

Impacts with 8+4 with Buffer Alternative (Locally Preferred Alternative)

Per the 2050 Regional Transportation Plan, implementation of the 8+4 with Buffer Alternative within the San Elijo Lagoon would occur between years 2015 to 2020. This phase includes the San Elijo bridge replacement, I-5 North Coast (NC) Bike Trail, and proposed Community Enhancement trails. See the enclosure. Permanent impacts from these improvements would use approximately 0.23 acres with 0.56 acres of temporary impacts for a temporary construction easement. At project completion, the temporary construction easement would re-establish the maintenance and pedestrian trail. The total area for use consists of degraded coastal sage scrub habitat, and is approximately 0.079% of the total Reserve area. Approximately 0.61 ac of this use would occur on property owned by the County of San Diego, while the remaining 0.18 ac would occur on property owned by the CDFW. See the enclosed figure. These minor land uses would not alter or affect any recreation activities at the lagoon. Coordination with the CDFW, DPR, and the SELC will continue to clarify the proposed use.

Proposed De Minimis Finding

Under any I-5 NCC Project alternative, the quantity of Reserve land proposed for use is extremely small at 0.79 acres. Access to existing trailheads and designated trails would remain open, and after project implementation would be enhanced. The visual character of the Reserve



would not be measurably altered by the freeway widening. The existing noise levels in the Reserve range from 60 dBA to 67 dBA. With the project, future noise levels at the Reserve are projected to increase approximately 1 dBA from the existing noise levels. This 1 dBA increase would not be perceptible to the human ear. The increase in noise would not substantially increase the potential for noise to impact sensitive species. Therefore, increases in traffic-related noise would not be noticeable to park users and would not impair the wildlife habitat functions of the Reserve.

Areas of natural vegetation disturbed through construction would be restored with native plant species and mitigated at ratios agreed upon by the resource agencies as part of the overall mitigation plan for the proposed project. In recognition of the unique opportunities and value of comprehensive lagoon restoration activities for corridor lagoons, the mitigation plan called the Resource Enhancement Mitigation Program (REMP) includes large-scale lagoon ecosystem restoration and enhancement mitigation opportunities, which will result in significant ecological lift to the lagoon system. The mitigation opportunity includes potential funding for a large-scale lagoon restoration program in full for San Elijo Lagoon, which would be in addition to funds already contributed to previous and ongoing planning and technical evaluation activities necessary to facilitate and implement these lagoon restoration programs. Large-scale lagoon restoration in San Elijo Lagoon may include, but is not limited to, enhancement and restoration (both types) of wetland and other aquatic resources in the associated Lagoons. The intent of the large-scale lagoon restoration funding is to improve the ecological health and hydrological connectivity and to enhance critical coastal resources and habitats. The degraded upland coastal sage community located within the area for de minimis is currently included within the mitigation plan. The upland habitat would be mitigated outside of the lagoon at Dean and Deer Canyon mitigation sites.

Overall, it is expected that use of up to 0.23 acres for a permanent impact and 0.56 ac for a temporary construction easement of Reserve land would not adversely affect any of the activities, features, or attributes of the Reserve that qualify the resource for protection under Section 4(f) and is proposed as de minimis.

Coordination and Communication between Caltrans/FHWA and the County of San Diego

Specific responses to each comment in your November 23, 2010, letter from DPR to Caltrans regarding the I-5 NCC Project DEIS will be included in the Final Environmental Impact Statement (FEIS). The DPR has stated it would like additional information prior to concurrence with the proposed *de minimis* finding. Summaries of the more substantive issues raised in relation to this issue, and their responses, are as follows:



Trailheads at Solana Hills Drive and North Rios Avenue in City of Solana Beach

Issues The trailhead was described as being a rather minor access point and it was stated that enhancements at the more heavily used North Rios Avenue trailhead should be explored instead. Questions of ownership and maintenance were also raised along with confirmation that an easement road would still be accessible. There were also concerns over the nature of proposed lighting, of a retaining wall, and over erosion control at the North Rios Avenue trailhead.

The locations of proposed community enhancements were discussed with various Response stakeholders, with improvements to the existing trailhead prioritized by the City of Solana Beach, which would manage the proposed amenities. Improvements to other access points and various enhancements, including means of controlling erosion, could be a point of the ongoing stakeholder discussion. Easement road access would be maintained. Lighting would be provided for safety along the I-5 Bike Trail connected to the I-5 freeway, but would be shielded and directed away from the Reserve. Unless lighting is required by the cities, no lighting for the trails within the Reserve is anticipated. Daytime lighting of undercrossings may be required on some trails, though nighttime lighting is not proposed for trails within the Reserve, which would help discourage nighttime use. The purpose of the retaining wall is to minimize encroachment onto adjacent habitat, and it would need to be 30-40 feet tall in order to do so. The freeway users would see the face of the wall. The trail users would be above the retaining wall. In addition, planting to screen the wall is a commitment as part of project design, diminishing perceived incompatibility with the character of the Reserve. Caltrans is in ongoing, extensive coordination with the California Coastal Commission (CCC), and only native plant species would be planted. The Design Guidelines for I-5 strives to be consistent with the character of the adjacent community landscape. Therefore, Caltrans would coordinate with the stakeholders and the CCC to determine if non-native drought tolerant plants would also be feasible to screen the retaining walls in certain areas.

Manchester Avenue Pedestrian Bridge and Trail, City of Encinitas

Issues Concerns over nighttime lighting impacts on wildlife and on perceived security issues were raised at this location, along with trail and retaining wall design. Potential public safety and access problems in an adjacent area were also raised.

Response The Manchester Avenue pedestrian bridge and suspended trail would comprise part of the regional I-5 North Coast Bike Trail to provide for and improve public access. Lighting would be provided along Manchester Avenue and the bridge for safety, but would be shielded to help focus light on the trail and avoid the Reserve. The use of retaining walls would



reduce the size of the impacted area and, along with fencing, help keep users out of more sensitive areas. In certain locations signage would also be used to discourage access into sensitive areas and to advise users that the Reserve is closed after dark. The bike trail is not within the Reserve. Requested access points between the I-5 Bike Trail and the Reserve would be coordinated with the DPR, DFW, and SELC to install features that restrict bicycle access to the reserve trails. Co-located bike/pedestrian trails would consist of paved surface for bikes and an adjacent soft surface for pedestrians. The pedestrian trail along the west side of the freeway south of the lagoon within the Reserve would be decomposed granite. The toe of the slope would be revegetated with salt marsh species and bioswales would be kept out of wetland.

Issues 2e) Retaining walls adjacent to the proposed trail along the south side of the lagoon do not fit the natural character of the lagoon and may interfere with proposed restoration efforts. Please design the trail such that a retaining wall is not required.

Response The retaining wall proposed on the south side of the lagoon would support the trail mid-slope rather than down at toe of slope where it is currently sited. The purpose of the wall is to minimize slope spread, separate trail users from more sensitive portions of the lagoon such as areas along the water edge, and retain construction and use impacts to within Caltrans right-of-way. Lack of a retaining wall would result in additional environmental impacts and is therefore currently not under consideration for final design. The retaining wall is being developed in coordination with the restoration efforts.

Issues 2c) Trail improvements on the west side of I-5 should extend the length of the berm to connect to the existing trail along the south shore of the lagoon. A current foot trail at the toe of the slope should be removed during construction of the bio-swale, and the area returned to salt marsh.

Response A retaining wall would be installed to support a 12-foot-wide paved trail along the south side of the lagoon for bicycles and pedestrians. Fencing and other methods, as well as signage, would be used to keep bicycles on the approved trail and out of the reserve. A pedestrian trail would also be continued on the east side of the lagoon. This would eliminate the need for the existing trail at the toe of slope in this area and provide additional area for restoration. The impact area at the toe of the slope will be revegetated with salt marsh species. The bioswales will not be placed within the wetland.



Mr. Brian Albright, Director August 1, 2013 Page 7

Affected Environment, Consequences, and Avoidance, Minimization, and Mitigation Measures

Issues It was stated that the EIR/EIS be revised to include analysis of its relationship to various regional trails, including the California Coastal Trail, the Coast to Crest Trail, and the Trans County Trail. Mention was made that regulatory language citations may have been in error, that there were discrepancies in certain acreage impacts reported, and that there was a need for a map showing sensitive plant locations for the San Elijo Lagoon.

Response Project elements including various pedestrian and bicycle trail enhancements would be expected to improve the movement of users throughout the corridor, including those traveling a local, short distance and those traveling further, and is consistent with goals for the area. By facilitating improved pedestrian and bicycle movement along the project area, access to other local or regional trails is also enhanced whether or not these other trails are contiguous with trails along the 1-5 corridor. This results from the reduction or elimination of non-contiguous segments that would otherwise force users onto surface streets, and thereby improves movement throughout the region. Regarding regulatory language, the code cited is an implementing code for the original codification at 23 USC 303, and is cited as part of the Caltrans template for CEQA/NEPA environmental documents. The refined 8+4 Buffer Alternative is identified in the FEIR/EIS as the Preferred Alternative, and the amount of impact is anticipated to be 0.18 acres, with the numbers in Section 3.1.3 and Appendix A now matching. Additionally, a figure showing sensitive plant species on San Elijo Lagoon slopes was included as Figure 3.19.1, Sensitive Plant Locations, in the DEIR/EIS and is retained in the FEIR/EIS.

Appendix A – Resources Evaluated Relative to 4(f), Section 4.2 San Elijo Lagoon Ecological Reserve

Issues The I-5 NCC project's trail improvements to the existing informal trail under the I-5 bridge would represent a more formal accommodation of this trail that connects with other trails on the berms running parallel to I-5 along the east and west sides, but this trail is not currently maintained by DPR and it was requested that Caltrans maintenance responsibility be specified. Also, it was stated that the City of Encinitas does not have jurisdiction in accordance with Section 774.17 23 USC 774, and that instead jurisdiction lies with the agencies that own or administer the property which is, in this case, the County of San Diego. It was stated that while it appeared mitigation measures might qualify the project for a *de minimis* finding, no replacement parkland had been proposed, DPR had not been consulted, and that DPR would like a meeting with Caltrans to discuss avoidance and mitigation measures in order to reassure the County that *de minimis* standards are met.



Mr. Brian Albright, Director August 1, 2013 Page 8

Response Maintenance for any trail within the San Elijo Conservancy including the pedestrian/bike bridge would be the responsibility of the DPR, City, or the SELC as part of a Maintenance Agreement reached prior to construction. Caltrans will continue to coordinate with agencies having jurisdiction over Section 4(f) properties in regards to impacts and to mitigation in order to help reduce or avoid them. The enhancements in this area would be expected to be neutral or even beneficial relative to existing conditions. Project footprint effects on habitat would be addressed through the project mitigation plan and associated Project Works Plan / Transportation and Resource Enhancement Program (PWP/TREP). Also, it should be noted that replacement parkland is not required under Section 4(f), though it may be a part of Section 6(f) analysis.

On April 3, 2013, Caltrans, on behalf of FHWA, met with CDFW, DPR, and SELC.

Since the project design is still in the preliminary phases, further coordination with the CDFW, DPR, and SELC will occur regarding the following:

- · Continuing discussions on separation between pedestrians and bicyclists.
- Ensuring that access control coordination for signage and gates within the Reserve is continued. In particular, Solana Hills Drive and the NC Bike Trail.
- Continuing discussions in which existing trails should be tied into the bench trail under the south abutment.
- Continuing discussions to ensure trails and maintenance roads are open for use during construction.
- Working with all stakeholders on design details (fencing, retaining walls, signage, access, pavement surface, plants, and maintenance).
- Providing information on the cut and fill volumes associated with impacts to San Elijo triggered by Section 4(f).
- · Continuing discussions regarding right-of-way exchange.

Furthermore, Caltrans acknowledges the CDFW, DPR, and SELC may identify other concerns besides those listed above. For that reason, Caltrans looks forward to continued coordination throughout the project lifecycle.



Mr. Brian Albright, Director August 1, 2013 Page 9 Caltrans is now requesting your written concurrence in this de minimis determination, as required under Section 4(f) (49 U.S.C. 303[d]; and 23 U.S.C. 138). A signature block is provided at the bottom of this letter for your convenience. If you have any questions, please contact Shay Lynn Harrison, Chief, Environmental Analysis, Branch C, at (619) 688-0190. Sincerely, BRUCE L. APRIL Deputy District Director, Environmental Enclosures c: Shay Lynn M. Harrison, Chief, Environmental Analysis, Branch C "Caltrans improves mobility across California"



Mr. Brian Albright, Director August 1, 2013 Page 10

County of San Diego, Parks and Recreation Concurrence with *De Minimis* Impact Finding for San Elijo Lagoon Reserve

The signature below represents written concurrence on the *de minimis* impact finding that the proposed Interstate 5 North Coast Corridor Project 8+4 Buffer Alternative would not adversely affect the activities, features, and attributes that qualify the property, San Elijo Lagoon, for protection under Section 4(f) within the County of San Diego.

9/10/13

Mr. Brian Albright

Director

Parks and Recreation, County of San Diego



STATE OF CALIFORNIA-CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 11 4050 TAYLOR STREET, M.S. 242 SAN DIEGO, CA 92110 PHONE (619) 688-0100 FAX (619) 688-4237 TTY 711 www.dol.ca.gov



I-lex your power! Be energy efficient!

August 6, 2013

11-SD-5 PM: R28.4 to R55.4 EA: 235800 (1100000159) SCH#: 2004101076

Mr. Doug Gibson San Elijo Lagoon Conservancy 2049 San Elijo Avenue Cardiff-by-the-Sea, CA 92007

Dear Mr. Gibson:

RE: San Elijo Lagoon Potential Impacts with I-5 NCC Project

The California Department of Transportation (Caltrans) District 11, on behalf of the Federal Highway Administration (FHWA), is seeking written concurrence for potential use of a portion of the San Elijo Lagoon Ecological Reserve within the City of Encinitas along Interstate 5 (I-5) that potential use of reserve land would not alter the functions of this ecological reserve.

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966 states that a policy of the United States Government is that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. These requirements are now codified at 49 U.S.C. § 303 and 23 U.S.C. § 138. FHWA and Caltrans have concluded that the San Elijo Lagoon warrants protection under Section 4(f) as it is a publicly accessed and publicly leased recreation area.

FHWA and Caltrans have prepared a Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) and a Supplemental Draft Environmental Impact Report/Environmental Impact Statement (Supplemental Draft EIR/EIS) for the proposed I-5 North Coast Corridor Project (I-5 NCC Project). FHWA and Caltrans propose improvements to maintain or improve the existing and future traffic operations on the existing I-5 freeway from La Jolla Village Drive in San Diego to Harbor Drive in Oceanside/Camp Pendleton, extending approximately 27 miles (PM R28.4 to R55.4) along I-5. Impacts to San Elijo Lagoon were discussed in Appendix A: Resources Evaluated Relative to the Requirements of Section 4(f).

In July 2011, Caltrans identified the 8+4 Buffer Alternative (I-5 Express Lanes) as the Locally Preferred Alternative (LPA). The LPA consists of two high-occupancy vehicle (HOV)/Managed Lanes in each direction, separated by a buffer from the existing four general purpose lanes in each direction.



APPLICABILITY OF SECTION 4(f)

Section 4(f) allows the USDOT to determine that certain uses of a Section 4(f) land would have no adverse effect on the protected resource. Such *de minimis* impacts on publicly owned parks; recreational areas of national, state or local significance; wildlife or waterfowl refuges; or lands from a historic site of national, state or local significance are defined as those that do not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) (49 U.S.C. 303[d]; 23 U.S.C. 138). When FHWA proposes to make a *de minimis* impact finding, it must provide an opportunity for public comment on the proposed finding (this was included in the public comment period for the I-5 NCC Project Draft EIR/EIS). In addition, the official(s) with jurisdiction over the Section 4(f) resource in question must concur, in writing, with the finding of Caltrans and FHWA (in the case of parks, recreation areas, and wildlife and waterfowl refuges) that the project would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection (23 CFR § 774.5[b]).

SAN ELIJO LAGOON ECOLOGICAL RESERVE

The San Elijo Lagoon Ecological Reserve is located within the cities of Encinitas and Solana Beach and extends inland to the community of Rancho Santa Fe. The Reserve is bordered by the Pacific Ocean to the west, and a mix of residential and undeveloped land to the east, north, and south. The entire Reserve is approximately 1,000 acres (ac) in size. It is primarily a shallow-water estuary fed by a 77-miles squared (mi²) watershed with two main tributaries, Escondido Creek and La Orilla Creek, and is divided into a west, central, and eastern basin by Highway 101, the railway, and 1-5. It contains a diverse habitat with six plant communities including coastal strand, salt marsh, freshwater marsh, riparian scrub, coastal sage scrub, and mixed chaparral. The habitat supports a variety of plant and wildlife species.

The Reserve is owned jointly by the California Department of Fish and Wildlife (CDFW), the County of San Diego Department of Parks and Recreation (DPR) and the San Elijo Lagoon Conservancy (SELC). All three agencies have an agreement to operate San Elijo Lagoon as a State Ecological Reserve under the administration of the DPR. The boundary of the Reserve is contiguous with Caltrans right-of-way where 1-5 separates the eastern and central basins. The Reserve includes over 8 km (7 mi) of hiking trails open to the public. These trails can be reached from the north end of Rios Avenue, Holmwood Lane, Solana Hills Drive, Santa Inez Drive, Santa Carina Drive, and Santa Helena Drive on the south side of the lagoon in Solana Beach, and along El Camino Real at La Orilla Creek in the community of Rancho Santa Fe at the east end.



The trails are designated for hiking-only in the Central Basin, and both equestrian and hiking in East Basin. The multi-use trail system is restricted to the East Basin, as the riprap slope protection under the I-5 bridge at Manchester Avenue prevents equestrian passage into the West Basin. A Nature Center, located at 2710 Manchester Avenue in Encinitas on the northwest side of the Reserve, provides county ranger offices, museum-quality exhibits, an observation deck, tables and chairs, a parking lot, restrooms, drinking water, and a 1 mile loop trail.

Visitor usage of the Reserve is estimated between 100,000 to 120,000 visitor use days per year (entry onto the Reserve is equal to one visitor use per day). The Nature Center visitor usage is approximately 55,000 to 65,000 visitor use days per year. Visitors are primarily residents of the surrounding neighborhoods, and jogging is popular along the southern trails. School field trips are held at the Nature Center as well as the Rios and Santa Carina trailheads. The park's status as a publicly owned ecological Reserve and recreation area qualifies the Reserve as a resource subject to protection under Section 4(f).

Impacts with 8+4 with Buffer Alternative (Locally Preferred Alternative)

Per the 2050 Regional Transportation Plan, implementation of the 8+4 with Buffer Alternative within the San Elijo Lagoon would occur between years 2015 to 2020. This phase includes the San Elijo bridge replacement, 1-5 North Coast (NC) Bike Trail, and proposed Community Enhancement trails. See the enclosure. Permanent impacts from these improvements would use approximately 0.23 acres with 0.56 acres of temporary impacts for a temporary construction easement. At project completion, the temporary construction easement would re-establish the maintenance and pedestrian trail. The total area for use consists of degraded coastal sage scrub habitat, and is approximately 0.079% of the total Reserve area. Approximately 0.61 ac of this use would occur on property owned by the County of San Diego, while the remaining 0.18 ac would occur on property owned by the CDFW. See the enclosed figure. These minor land uses would not alter or affect any recreation activities at the lagoon. Coordination with the CDFW, DPR, and the SELC will continue to clarify the proposed use.

Proposed De Minimis Finding

Under any I-5 NCC Project alternative, the quantity of Reserve land proposed for use is extremely small at 0.79 acres. Access to existing trailheads and designated trails would remain open, and after project implementation would be enhanced. The visual character of the Reserve would not be measurably altered by the freeway widening. The existing noise levels in the Reserve range from 60 dBA to 67 dBA. With the project, future noise levels at the Reserve are projected to increase approximately 1 dBA from the existing noise levels. This 1 dBA increase would not be perceptible to the human ear. The increase in noise would not substantially



increase the potential for noise to impact sensitive species. Therefore, increases in traffic-related noise would not be noticeable to park users and would not impair the wildlife habitat functions of the Reserve.

Areas of natural vegetation disturbed through construction would be restored with native plant species and mitigated at ratios agreed upon by the resource agencies as part of the overall mitigation plan for the proposed project. In recognition of the unique opportunities and value of comprehensive lagoon restoration activities for corridor lagoons, the mitigation plan called the Resource Enhancement Mitigation Program (REMP) includes large-scale lagoon ecosystem restoration and enhancement mitigation opportunities, which will result in significant ecological lift to the lagoon system. The mitigation opportunity includes potential funding for a large-scale lagoon restoration program in full for San Elijo Lagoon, which would be in addition to funds already contributed to previous and ongoing planning and technical evaluation activities necessary to facilitate and implement these lagoon restoration programs. Large-scale lagoon restoration in San Elijo Lagoon may include, but is not limited to, enhancement and restoration (both types) of wetland and other aquatic resources in the associated Lagoons. The intent of the large-scale lagoon restoration funding is to improve the ecological health and hydrological connectivity and to enhance critical coastal resources and habitats. The degraded upland coastal sage community located within the area for de minimis is currently included within the mitigation plan. The upland habitat would be mitigated outside of the lagoon at Dean and Deer Canyon mitigation sites.

Overall, it is expected that use of up to 0.23 acres for a permanent impact and 0.56 ac for a temporary construction easement of Reserve land would not adversely affect any of the activities, features, or attributes of the Reserve that qualify the resource for protection under Section 4(f) and is proposed as de minimis.

Coordination between Caltrans/FHWA and the San Elijo Lagoon Conservancy

In correspondence received from the SELC during the public comment period for the Draft Environmental Impact Report / Environmental Impact Statement for the Interstate 5 North Coast Corridor Project and the comment period for the Supplemental Draft Environmental Impact Report / Environmental Impact Statement for the Interstate 5 North Coast Corridor Project, the SELC did not protest regarding the *de minimis* findings made by Caltrans/FHWA.



On April 3, 2013, Caltrans, on behalf of FHWA, met with CDFW, DPR, and SELC.

Since the project design is still in the preliminary phases, further coordination with the CDFW, DPR, and SELC will occur regarding the following:

- · Continuing discussions on separation between pedestrians and bicyclists.
- Ensuring that access control coordination for signage and gates within the Reserve is continued. In particular, Solana Hills Drive and the NC Bike Trail.
- Continuing discussions in which existing trails should be tied into the bench trail under the south abutment.
- Continuing discussions to ensure trails and maintenance roads are open for use during construction.
- Working with all stakeholders on design details (fencing, retaining walls, signage, access, pavement surface, plants, and maintenance).
- Providing information on the cut and fill volumes associated with impacts to San Elijo triggered by Section 4(f).
- · Continuing discussions regarding right-of-way exchange.

Furthermore, Caltrans acknowledges the CDFW, DPR, and SELC may identify other concerns besides those listed above. For that reason, Caltrans looks forward to continued coordination throughout the project lifecycle.

Caltrans is now requesting your written concurrence in this *de minimis* determination, as required under Section 4(f) (49 USC 303[d]; 23 USC 138[d]). A signature block is provided at the bottom of this letter for your convenience. If you have any questions, please contact Shay Lynn Harrison, Chief, Environmental Analysis, Branch C, at (619) 688-0190.

Sincerely,

BRUCE L. APRIL

Deputy District Director, Environmental

Enclosure

c: Shay Lynn M. Harrison, Chief, Environmental Analysis, Branch C



San Elijo Lagoon Conservancy Concurrence with De Minimis Impact Finding for San Elijo Laguon Reserve The signature below represents written concurrence on the de minimis impact finding that the proposed Interstate 5 North Coast Corridor Project 8+4 Buller Alternative would not adversely affect the activities, features, and attributes that qualify the property, San Elijo Lagoon, for protection under Section 4(f) within the City of Encinitas. Mr. Doug Gib on Executive Director and Principal Scientist San Elijo Lagoon Conservancy "altrans expenses worklin scena Cabiana



Appendix B: Title VI Relocation Policy Statement



STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR P.O. BOX 942873, MS-49 SACRAMENTO, CA 94273-0001 PHONE (916) 654-5266 FAX (916) 654-6608 TTY 711 www.dot.ca.gov



March 16, 2012

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact Mario Solis, Manager, Title VI and Americans with Disabilities Act Program, California Department of Transportation, 1823 14th Street, MS-79, Sacramento, CA 95811. Phone: (916) 324-1353, TTY 711, fax (916) 324-1869, or via email: *mario solis@dot.ca.gov*.

MALCOLM DOUGHERTY

Acting Director



Appendix C: Relocation Assistance Information



DECLARATION OF POLICY

"The purpose of this title is to establish a *uniform policy for fair and equitable treatment* of persons displaced as a result of federal and federally assisted programs in order that such persons *shall not suffer disproportionate injuries* as a result of programs designed for the benefit of the public as a whole."

The Fifth Amendment to the U.S. Constitution states, "No Person shall...be deprived of life, liberty, or property, without due process of law, nor shall private property be taken for public use without just compensation." The Uniform Act sets forth in statute the due process that must be followed in Real Property acquisitions involving federal funds. Supplementing the Uniform Act is the government-wide single rule for all agencies to follow, set forth in 49 Code of Federal Regulations, Part 24. Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments, as discussed below.

FAIR HOUSING

The Fair Housing Law (Title VIII of the Civil Rights Act of 1968) sets forth the policy of the United States to provide, within constitutional limitations, for fair housing. This Act, and as amended, makes discriminatory practices in the purchase and rental of most residential units illegal. Whenever possible, minority persons shall be given reasonable opportunities to relocate to any available housing regardless of neighborhood, as long as the replacement dwellings are decent, safe, and sanitary and are within their financial means. This policy, however, does not require Caltrans to provide a person a larger payment than is necessary to enable a person to relocate to a comparable replacement dwelling.

Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displacee in order to see that all payments and benefits are fully utilized, and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments. At the time of the initiation of negotiations (usually the first written offer to purchase), owner-occupants are given a detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted soon after the initiation of negotiations, and also are given a detailed explanation of Caltrans Relocation Assistance Program. To avoid loss of possible benefits, no individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Caltrans relocation advisor.

RELOCATION ASSISTANCE ADVISORY SERVICES

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, Caltrans will provide relocation advisory assistance to any person, business, farm or nonprofit organization displaced as a result of the acquisition of real property for public use, so long as they are legally present in the United States. Caltrans will assist eligible displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are "decent, safe and sanitary." Nonresidential displacees will receive information on comparable properties for lease or purchase (For business, farm and nonprofit organization relocation services, see below).



Residential replacement dwellings will be in a location generally not less desirable than the displacement neighborhood at prices or rents within the financial ability of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include the supplying of information concerning federal and State assisted housing programs, and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without first being given at least 90 days written notice. Residential occupants eligible for relocation payment(s) will not be required to move unless at least one comparable "decent, safe and sanitary" replacement dwelling, available on the market, is offered to them by Caltrans.

RESIDENTIAL RELOCATION PAYMENTS

The Relocation Assistance Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of a replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Assistance Program can be summarized as follows:

Moving Costs

Any displaced person, who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule. Lawful occupants who move into the displacement property after the initiation of negotiations must wait until Caltrans obtains control of the property in order to be eligible for relocation payments.

Purchase Differential

In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their property for 180 days or more prior to the date of the initiation of negotiations (usually the first written offer to purchase the property), may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate. The maximum combination of these three supplemental payments that the owner-occupant can receive is \$22,500. If the total entitlement (without the moving payments) is in excess of \$22,500, the Last Resort Housing Program will be used (See the explanation of the Last Resort Housing Program below).



Rent Differential

Tenants and certain owner-occupants (based on length of ownership) who have occupied the property to be acquired by Caltrans prior to the date of the initiation of negotiations may qualify to receive a rent differential payment. This payment is made when Caltrans determines that the cost to rent a comparable "decent, safe and sanitary" replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the <u>Down Payment</u> section below. The maximum amount payable to any eligible tenant and any owner-occupant of less than 180 days, in addition to moving expenses, is \$5,250. If the total entitlement for rent supplement exceeds \$5,250, the Last Resort Housing Program will be used.

In order to receive any relocation benefits, the displaced person must buy or rent and occupy a "decent, safe and sanitary" replacement dwelling within one year from the date Caltrans takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

Down Payment

The down payment option has been designed to aid owner-occupants of less than 180 days and tenants in legal occupancy prior to Caltrans' initiation of negotiations. The down payment and incidental expenses cannot exceed the maximum payment of \$5,250. The one-year eligibility period in which to purchase and occupy a "decent, safe and sanitary" replacement dwelling will apply.

Last Resort Housing

Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program on federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard residential relocation as explained above. Last Resort Housing has been deigned primarily to cover situations where a displacee cannot be relocated because of lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed the \$22,500 and \$5,250 limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances.

After the initiation of negotiations, Caltrans will within a reasonable length of time, personally contact the displacees to gather important information, including the following:

- Number of people to be displaced;
- Specific arrangements needed to accommodate any family member(s) with special needs;
- Financial ability to relocate into comparable replacement dwelling which will adequately house all members of the family:
- Preferences in area of relocation;
- Location of employment or school.



NONRESIDENTIAL RELOCATION ASSISTANCE

The Nonresidential Relocation Assistance Program provides assistance to businesses, farms and nonprofit organizations in locating suitable replacement property, and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for a particular business's specific relocation needs. The types of payments available to eligible businesses, farms and nonprofit organizations are: searching and moving expenses, and possibly reestablishment expenses; or a fixed in lieu payment instead of any moving, searching and reestablishment expenses. The payment types can be summarized as follows:

Moving Expenses

Moving expenses may include the following actual, reasonable costs:

- The moving of inventory, machinery, equipment and similar business-related property, including: dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property. Items acquired in the right-of-way contract may not be moved under the Relocation Assistance Program. If the displacee buys an Item Pertaining to the Realty back at salvage value, the cost to move that item is borne by the displacee.
- Loss of tangible personal property provides payment for actual, direct loss of personal property that the owner is permitted not to move.
- Expenses related to searching for a new business site, up to \$2,500, for reasonable expenses actually incurred.

Reestablishment Expenses

Reestablishment expenses related to the operation of the business at the new location, up to \$10,000 for reasonable expenses actually incurred.

Fixed In Lieu Payment

A fixed payment in lieu of moving, searching, and reestablishment payments may be available to businesses which meet certain eligibility requirements. This payment is an amount equal to half the average annual net earnings for the last two taxable years prior to the relocation and may not be less than \$1,000 nor more than \$20,000.

ADDITIONAL INFORMATION

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or for the purpose of determining the extent of eligibility of a displacee for assistance under the Social Security Act, or any other law, *except* for any federal law providing local "Section 8" Housing Programs.

Any person, business, farm or nonprofit organization which has been refused a relocation payment by Caltrans relocation advisor or believes that the payment(s) offered by the agency are inadequate, may appeal for a special hearing of the complaint. No legal assistance is required. Information about the appeal procedure is available from the relocation advisor.

California law allows for the payment for lost goodwill that arises from the displacement for a pubic project. A list of ineligible expenses can be obtained from Caltrans right-of-way. California's law and the federal regulations covering relocation assistance provide that no payment shall be duplicated by other payments being made by the displacing agency.







Appendix D: Environmental Commitments Record (ECR)







Environmental Commitments Record

Interstate 5 North Coast Corridor Project Improvements

Environmental Generalist: <u>Shay Lynn M. Harrison</u> File: 11-SD-5
Phone: <u>619-688-0190</u> KP: R45.75/R89.15 (PM R28.4/R55.4)
Date: <u>May 2013</u> EA: 235800

Task and Brief Description		ponsible ich / Staff	Timing / Phase	Action Taken to Comply with Task	Ta Comp		Remark	Environ Compl	
					Initial	Date		Initial	Date
Geotechnical Investigations	Design Geolog	Engineer / st	Design						
Design Kick Off		ement / Engineer / mental Staff	Design						
Environmental PS&E Review Meeting	Project Manage Environ	ement / mental Staff	Design						
Pre-Construction Meeting	Project Manage Resider	ement / nt Engineer	Pre- construction						
Pre-Job Meeting	Project Manage Resider	ement / nt Engineer	Construction						
Mid Construction Meeting	Project Manage Resider	ement / nt Engineer	Construction						
Design Features Memorandum	Project Manage Resider	ement / nt Engineer	Post- construction						
Environmental Compliance Review		ement / nt Engineer / mental Staff	Construction						
Permits and Approvals									
U.S. Fish and Wildlife Service									
Endangered Species Act Section 7 Consultation – Threatened and Endangered Species	Constru Environ	nt Engineer / ction / mental / d Biologist	Pre- construction						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta Comp		Remark	Environ Comp	
					Initial	Date		Initial	Date
U.S. Army Corps of Engineers		_							_
Clean Water Act Section 404 Individual Permit		Resident Engineer / Construction / Environmental / Qualified Biologist	Pre- construction						
Marine Protection Research and Sanctuaries Act Section 103 Permit		Resident Engineer / Construction / Environmental / Qualified Biologist	Pre- construction						
Rivers and Harbors Act Section 408 Permit		Resident Engineer / Construction / Environmental / Qualified Biologist	Pre- construction						
California Department of Fish and Wildlife					•			•	•
Section 1602 Streambed Alteration Agreement		Resident Engineer / Construction / Environmental / Qualified Biologist	Pre-construction						
Regional Water Quality Control Board	1		<u> </u>			l l		,	
Clean Water Act Section 401 Certification		Resident Engineer / Construction / Environmental / Qualified Biologist	Pre- construction (NPDES)						
California Coastal Commission						l l		l e	
Coastal Zone Management Act Federal Consistency Determination		Environmental	Pre- construction (PWP / TREP)						
Coastal Development Permits		Resident Engineer / Construction / Environmental	Pre- construction						
Other Applicable Permits	_								
Comply with project permits		DesignEngineer / Environmental	Pre- construction / Construction						
Farmlands / Agricultural Lands / Coastal Zone Impacts									
Temporary impacts to agricultural resources due to construction / assembly and construction staging areas, including temporary conversion of important agricultural lands or other temporary disruption of agricultural activities, would be addressed by returning any affected area to pre-existing agricultural use after project construction is completed.	Section 3.3.4	Design Engineer / Resident Engineer	Design / Construction						
Permanent impacts to active coastal agricultural land within the City of Encinitas and City of Carlsbad would be addressed on a site-specific basis, utilizing a tiered	Section 3.3.4	Project Management (Note: This could	Design / ROW Acquisition / Construction						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta: Comp		Remark	Environmental Compliance
					Initial	Date		Initial Date
approach. The first tier would be for implementation of in-kind, project-specific action located within the affected jurisdiction, and could include specific activities such as implementation of school or community gardens. Should a project within the affected jurisdiction not be feasible, the second tier would be implemented, which includes payment of an Agricultural Resource Impact Mitigation Fee, pursuant to an approved in-lieu fee program. The fee should be based on net acreage of affected coastal agricultural lands and should reflect the approximate cost of preserving coastal agricultural lands elsewhere in the North Coast		require high-level coordination and funding / land purchase commitments)						
Corridor Coastal Zone. Fees would be handled by the affected jurisdiction, and expended in the following order of								
priority:Purchase of agricultural lands and/or agricultural								
improvements that would aid in continuing agricultural production within the North Coast Corridor Coastal Zone.								
Committing to specific activities that support "urban								
agriculture," such as farm to school programs, farm to								
fork restaurants, buy local, farm to grocery stores,								
vertical farming, farmers markets, innovative								
approaches to "urban agriculture" that help to create a demonstration project, re-tooling existing agricultural								
operations to allow for vertical farming, innovative								
approaches to farming, or substantial reduction in water								
usage, and/or endowments to programs of study in								
agricultural sciences in the North Coast Corridor								
Coastal Zone.								
If determined feasible and desirable by the County of Son Diago, according with the County to establish a								
San Diego, coordinating with the County to establish a fund to offset loss of Williamson Act subvention funds								
from the State for 2009/2010.								
Construction staging and phasing plans should be prepared								
and submitted with each notice of impending development								
(NOID) for all project-related transportation improvement								
and associated community enhancement projects and should include information that specifies and quantifies any								
coastal agricultural resource areas that may be impacted								
by temporary project construction activities. Analysis of	Section 3.3.4	Design Engineer /	Design /					
temporary impacts from construction activities should be		Resident Engineer	Construction					
conducted for each NOID submittal in order to determine								
any loss of income or coastal agricultural production								
incurred as a result of the proposed construction activities,								
and appropriate action / compensation should be applied in the event that impacts are identified.								

Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Compl	
					Initial Date		Initial	Date
Plans for habitat restoration on properties supporting existing coastal agricultural uses should be prepared and submitted with the applicable NOID for restoration activities, and should include information that specifies and quantifies any important coastal agricultural resource areas that may be impacted by restoration activities.	Section 3.3.4	Qualified Environmental Staff	Design					
An economic feasibility study should be conducted for any proposed specific project that would result in permanent impacts to coastal agricultural resources in order to determine whether or not continued coastal agricultural production would be possible after the project-related impacts have occurred.	Section 3.3.4	Qualified Environmental Staff	Design					
Community Impacts	<u></u>	<u></u>						
Landscape and streetscape improvements would be provided in affected areas, where possible, and would be consistent with the visual atmosphere, historic architecture, and native vegetation in the area.	Section 3.4.1.4	Design Engineer / Landscape Architect	Design					
Reconfiguration of interchanges, overcrossings and undercrossings along the project corridor would improve pedestrian and bicycle facilities, provide linkages, and allow for improvements to public transit. Project features would serve to improve and facilitate connectivity between communities east and west of I-5 in locations that have been previously bisected by the freeway.	Section 3.4.1.4	Design Engineer	Design					
A Traffic Management Plan (TMP) would be prepared to minimize traffic delays and closures through the use of various traffic handling practices (see Traffic measures.)	Section 3.4.1.4	Traffic Engineer	Design					
A public awareness program would be developed to inform the public of upcoming detours and construction schedules (see Traffic measures.)	Section 3.4.1.4	Public Information Officer / Resident Engineer	Pre- construction / Construction					
Traffic impacts around schools would be noted in the TMP.	Section 3.4.1.4	Traffic Engineer	Design					
Equipment would have sound-control devices to minimize noise, and other specifications to turn off idling equipment and installing temporary acoustic barriers around stationary construction noise sources would be implemented.	Section 3.4.1.4	Resident Engineer	Construction					
Construction equipment and truck staging and maintenance areas would be located as far as feasible and nominally downwind of schools, active recreation areas, and other communities of high-population density.	Section 3.4.1.4	Design Engineer / Resident Engineer	Design / Construction					
In the event any hazardous materials are located within the vicinity of any Oceanside Unified School District school, including but not limited to the Oceanside High School, Caltrans would immediately notify the District and provide an explanation of the remediation measures to address the discovery of any hazardous materials during the construction of the project.	Section 3.4.1.4	Resident Engineer	Construction					

Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta: Comp		Remark	Environ Comp	
					Initial	Date		Initial	Date
The project would implement Caltrans' Standard Specifications related to temporary dust and emissions, as well as noise control.	Section 3.4.1.4	Resident Engineer	Construction						
Relocations									
Provide relocation assistance to eligible residents in compliance with Caltrans' Relocation Assistance Program. Displacees that may face difficulty finding suitable relocation resources would be eligible for assistance from Caltrans through the State's relocation program or Last Resort Housing (LRH) Program options, including LRH payments.	Section 3.4.2.4	Project Management / ROW Acquisition	ROW Acquisition						
Utilities and Emergency Services									
The Construction Zone Enhancement Enforcement Program (COZEEP) involves the presence of CHP to improve project safety by encouraging motorists to slow down and use care while driving through construction zones.	Section 3.5.3	Resident Engineer	Construction						
The Freeway Service Patrol program, a cooperative effort between Caltrans, SANDAG and the CHP to alleviate incident-related traffic congestion by operating tow services to aid stranded or disabled vehicles on urban freeways during morning and afternoon commuter periods, would be utilized.	Section 3.5.3	Resident Engineer	Construction						
A TMP would be developed to include various strategies to minimize delay during construction (see Traffic measures.)	Section 3.5.3	Traffic Engineer	Design						
Emergency providers and law enforcement officials would be informed of all detours to avoid or minimize increases in response times.	Section 3.5.3	Public Information Officer / Resident Engineer	Construction						
All applicable regulations regarding solid waste would be complied with as related to construction.	Section 3.5.3	Resident Engineer	Construction						
Coordination with the appropriate utility owners would occur during final design and construction to finalize relocation efforts.	Section 3.5.3	Design Engineer / Resident Engineer	Design / Construction						
Impacts to resources would be avoided when utilities are relocated, and Environmentally Sensitive Areas (ESAs) would be delineated when working near sensitive areas to prevent construction activities from impacting resources.	Section 3.5.3	Design Engineer / Biologist / Resident Engineer	Design / Construction						
Traffic & Transportation / Pedestrian & Bicycle Facilities									
Construction would be phased to minimize traffic delays.	Section 3.6.4.1	Design Engineer / Traffic Engineer / Resident Engineer	Design / Construction						
A comprehensive TMP to minimize traffic delays and closures through the use of various traffic handling practices during construction would be developed after selection of a preferred alternative but prior to the start of construction. Traffic delays would be controlled to the	Section 3.4.1.4, Section 3.5.3, and Section 3.6.4.1	Traffic Engineer / Design Engineer / Public Information Officer / Resident Engineer	Design / Construction						



construction operations. The TMP is designed to increase driver awareness, ease congestion, and minimize delay during construction. Many IMP components would be implemented prior to construction and could confuse after implemented prior to construction and could confuse after IMP would be. Public awareness Program: Strategies that would be considered to increase public swareness may include one or more of the following items. Speakers bureau Public awareness program: Strategies that would be considered to increase public swareness may include one or more of the following items. Speakers bureau Public awareness program: Tadio, television, and newspapers Public awareness and the speakers an	Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta Comp		Remark	Environ Compl	
author teasthe during parects of many simultaneous construction operations. The TMP designed to increase driver waveness, ease congestion, and minimize delay during construction. Many TMP components would be implemented prior to construction and could continue after minimize the delay during construction. Many TMP components would be implemented prior to construction and could continue after minimize the delay during construction. Many TMP could be considered to increase public awareness may include one or more of the following tiens: Mainings – construction bullefins, nevelotitors, public morices Public Awareness Program: Strategies that would be considered to increase public awareness may include one or more of the following tiens: Mainings – construction bullefins, nevelotitors, public morices Public Awareness Program: The would include one or more and nevelopages. Paid advertising Signs along roadway changeable message signs Telephone information line, holline, 7800° number Updates to local businesses Webpage Totalis Departure of the following tiens: Totalis Constitution Strategies include one or more of the total telephone during or nativation. Strategies that would be considered may include one or more of the total telephone during or nativation. Strategies that would be considered may include one or more of the total telephone during or nativation. Strategies that would be considered may include one or more of the total telephone during or nativation. Strategies that would be considered may include one or more of the strategies. The Pevaluation and adjustment Alternate route strategies Construction strategies, including tiene closure charts for closing lines, rampes, and connectors of construction strategies, including improvement to HOV/Managed Lanses and public transit. Traffic Engineer / pesign I coalision. Passign Bragineer / Pesign Engineer / Design / Construction.						Initial	Date		Initial	Date
during construction. Many TMP components would be implemented prior to construction and could continue after construction with local funding. The components of the TMP would be: Public Awareness Program: Strategies that would be considered to increase public awareness may include one or more of the following items: Mailings — construction bulletins, newsletters, public notices Speakers bureau Public service announcements: radio, television, and newspapers Paid advortising Signs along roadway: changeable message signs Telephone information line, hottine, "500" number Updates to local businesses Velopage Taffic Coeraions Strategies Program: This would include ongoing evaluation of traffic operations and would provide for incident response during construction. Strategies that would be considered may include one or more of the following items: Taffic Coeraions advanced to the considered may include one or more of the following items: The Wealuation and adjustment Alternate route strategies, including lane closure Construction strategies, including lane closure Construction strategies, including inprovement of Coeraic and public towards Temporary signal location CHP enforcement of construction zone speed limits during lane closure for potential public includes the consideration of construction of construction for gedestina and bits for would inthe construction for gedestina and bits for would inthe construction for gedestina and bits for the more oring public. Symposium of the protein information, in the protein public in the more oring public in the protein public in the more oring	extent feasible during periods of many simultaneous construction operations. The TMP is designed to increase driver awareness, ease congestion, and minimize delay									
construction with local funding. The components of the TMP would be considered to increase public awareness may include one or more of the flowing items: • Mailrings – construction bulletins, newsletters, public notices • Speakers bureau • Public sortices amouncements: radio, television, and newspapers • Page at soft sing drays; changeable message signs • Tollop rough charaction line, houline, "800" number • Updates to local businessae • Webpage Traffic Operations Strategies Program: This would include onlying and provide for incident response during construction. Strategies that would be considered may include one or more of the following items: • TMP evaluation and adjustment • Altermate route strategies • Construction strategies, including lane closure charts for closing lanes, ramps, and connectors • Delay clauses for the later re-opening of lane closures • Temporary signal location • CHP enforcement of construction zone speed limits during lane closures • Freeway Service Patrol • Demand Management strategies, including improvement to HoWiManaged Lanes and public improvement to HoWiManaged Lanes and public improvement to HoWiManaged Lanes and public may be a signal provide notion public. Signs along with consideration for the monoring publics, and would be load, as appropriate, to provide notices of bits and posterior and	during construction. Many TMP components would be									
The would be: Public Awaraness Programs Strategies that would be considered to increase public awareness may include one or more of the following items: Maings - construction bulletins, newsletters, public notices - paid advortising Speakers bureau Public Awaraness Public Awar										
considered to increase public awareness may include one or more of the following items: • Mallings – construction bulletins, newsletters, public notices • Speakers bureau • Public service announcements: radio, television, and newspapers • Paid advotatising • Signs along roadway: changeable message signs • Telephone information line, holline, "800" number • Updates to local businesses • Webpage • Webpage Traffic Operations Strategies Program: This would include ongoing evaluation of traffic operations and would provide for incident response during construction. Strategies that would be considered may include one or more of the following items: • Tim Pevaluation and adjustment • Allomate rotice strategies • Construction strategies, including lane closure charts for closing lanes, ramps, and connectors • Delay clauses for the late re-opening of lane closures • Temporary signal location • CHP enforcement of construction zone speed limits during lane closures • Freeway Sovice Patrol • Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrains and bicyclists along with consideration for the motoring public. As well as the time listed for the motoring public. Sak well as the time listed of the motoring public. Sak well as the time listed of the motoring public terms. Taffic Engineer / Design Engineer	TMP would be:									
Mailings – construction bulletins, newsletters, public notices Speakers bureau Public service announcements: radio, television, and newspapers Paid advortising Signs along roadway: changeable message signs Telephone information line, hotline, "800" number Updates to local businesses Webpage Updates to local businesses Webpage Traffic Operations Strategies Program: This would include ongoing evaluation of traffic operations and would provide for incident response during construction. Strategies that would be considered may include one or more of the following items: 1 Traffic Operations and adjustment Alternate route strategies Construction strategies, including lane closure charts for closing lanes, ramps, and connectors Delay clauses for the late re-opening of lane closures CHP enforcement of construction or strategies including lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrian sand bicyclists along with consideration for the motoring public, sans would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other perintent information. Section 3.6.4.2 Traffic Engineer / Design / Construction Section of the motoring public spas would be used, as appropriate, to provide notices of bike and pedestrian of ourse, detours and other perintent information.	Public Awareness Program: Strategies that would be considered to increase public awareness may include one or more of the following items:									
Public service announcements: radio, television, and newspapers Pald advertising Signs along roadway: changeable message signs Telephone information line, hotline, "800" number Updates to local businesses Webpage Webpage Traffic Operations Strategies Program: This would include on ground growing evaluation of traffic operations and would provide for inotident response during construction. Strategies that would be considered may include one or more of the following terms. The Pevaluation and adjustment Alternate route strategies, including lane closure charts for closing lanes; ramps, and connectors Delay clauses for the late re-opening of lane closure in the construction strategies, including and connectors Delay clauses for the late re-opening of lane closures Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrian and bicyclists along with consideration for the motoring public. Says would be used, as appropriate, to provide notices of bike and pedestrian closures, delours and other pertinent information. Section 3.6.4.2	 Mailings – construction bulletins, newsletters, public 									
and newspapers Paid advertising Signs along roadway: changeable message signs Telephone information line, hotline, "800" number Updates to local businesses Welpage Traffic Operations Strategies Program: This would include ongoing evaluation of traffic operations and would provide for incident response during construction. Strategies that would be considered may include one or more of the following items: TMP evaluation and adjustment Alternate route strategies Construction strategies, including lane closure charts for closing lanes, ramps, and connectors Delay clauses for the late re-opening of lane closures Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Design Alternate route strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrian loss and public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2. Traffic Enginer / Design Enginer / Pesign Engin	Speakers bureau									
Signs along roadway: changeable message signs Telephone information line, hotline, "800" number Updates to local businesses Webpage Traffic Operations Strategies Program: This would include ongoing evaluation of traffic Operations and would provide for incident response during construction. Strategies that would be considered may include one or more of the following items: TiMP evaluation and adjustment Alternate route strategies Construction strategies, including lane closure charts for closing lanes, ramps, and connectors Delay clauses for the late re-opening of lane closures Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TIMP would include components for pedestrians and bicyclists along with consideration for the motoring public. Signs would be used, as appropriate, to provide notices of bike and podestrian closures, detours and other perintent information.										
Traffic Operations Strategies Program: This would include ongoing evaluation of traffic operations and would provide for incident response during construction. Strategies that would be considered may include one or more of the following items: TMP evaluation and adjustment Alternate route strategies. Construction strategies, including lane closure charts for closing lanes, ramps, and connectors Delay clauses for the late re-opening of lane closures. Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public tansit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. Says would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other perintent information.										
Updates to local businesses Webpage Traffic Operations Strategies Program: This would include ongoing evaluation of traffic operations and would provide for incident response during construction. Strategies that would be considered may include one or more of the following items: The Pevaluation and adjustment Alternate route strategies Construction strategies, including lane closure charts for closing lanes, ramps, and connectors Delay clauses for the late re-opening of lane closures Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and biocyclists along with consideration for the motoring public. Sayes would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other perfunent information.										
Traffic Operations Strategies Program: This would include ongoing evaluation of traffic operations and would provide for incident response during construction. Strategies that would be considered may include one or more of the following items: TMP evaluation and adjustment Alternate route strategies Construction strategies, including lane closure charts for closing lanes, ramps, and connectors Delay clauses for the late re-opening of lane closures of the following items: Temporary signal location Temporary signal location Temporary service Patrol Demand Management strategies, including improvement of the MotoManaged Lanes and public transit The TMP would include components for pedestrians and biocyclists along with consideration for the motoring public, as well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and bedestrian closures. Section 3.6.4.2 Traffic Engineer / Design Engineer / Resident Engineer may be construction.										
Traffic Operations Strategies Program: This would include ongoing evaluation of traffic operations and would provide for incident response during construction. Strategies that would be considered may include one or more of the following items: TMP evaluation and adjustment Alternate route strategies Construction strategies, including lane closure charts for closing lanes, ramps, and connectors Delay clauses for the late re-opening of lane closures Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and biotectists along with consideration for the motoring public. Signs well as the items listed for the motoring public. Signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information.	•									
ongoing evaluation of traffic operations and would provide for incident response during construction. Strategies that would be considered may include one or more of the following items: TMP evaluation and adjustment Alternate route strategies, including lane closure charts for closing lanes, ramps, and connectors Delay clauses for the late re-opening of lane closures Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and biscyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information.	• vvebpage									
for incident response during construction. Strategies that would be considered may include one or more of the following items: • TMP evaluation and adjustment • Alternate route strategies • Construction strategies, including lane closure charts for closing lanes, ramps, and connectors • Delay clauses for the late re-opening of lane closures • Temporary signal location • CHP enforcement of construction zone speed limits during lane closures • Freeway Service Patrol • Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2 Traffic Engineer / Design / Construction	Traffic Operations Strategies Program: This would include									
would be considered may include one or more of the following items: • TMP evaluation and adjustment • Alternate route strategies • Construction strategies, including lane closure charts for closing lanes, ramps, and connectors • Delay clauses for the late re-opening of lane closures • Temporary signal location • CHP enforcement of construction zone speed limits during lane closures • Freeway Service Patrol • Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2										
following items: TMP evaluation and adjustment Alternate route strategies Construction strategies, including lane closure charts for closing lanes, ramps, and connectors Delay clauses for the late re-opening of lane closures Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2										
The TMP evaluation and adjustment Alternate route strategies, including lane closure charts for closing lanes, ramps, and connectors Delay clauses for the late re-opening of lane closures Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Tarffic Engineer / Design / Construction Design Engineer / Resident Engineer										
Construction strategies, including lane closure charts for closing lanes, ramps, and connectors Delay clauses for the late re-opening of lane closures Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2 Traffic Engineer / Design / Construction Design / Construction										
charts for closing lanes, ramps, and connectors Delay clauses for the late re-opening of lane closures Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2	 Alternate route strategies 									
 Delay clauses for the late re-opening of lane closures Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2 Traffic Engineer / Design Engineer / Resident Engineer Construction										
closures Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2 Traffic Engineer / Design / Construction Design Engineer / Resident Engineer	· · · · · · · · · · · · · · · · · · ·									
 Temporary signal location CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2 Section 3.6.4.2 Design / Construction Construction										
CHP enforcement of construction zone speed limits during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2 Traffic Engineer / Design Figineer / Resident Engineer Construction										
during lane closures Freeway Service Patrol Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2 Traffic Engineer / Design Engineer / Resident Engine										
Demand Management strategies, including improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2 Traffic Engineer / Design Engineer / Resident Engineer										
improvement to HOV/Managed Lanes and public transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2 Traffic Engineer / Design Engineer / Resident Engineer	 Freeway Service Patrol 									
transit The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2 Traffic Engineer / Design Engineer / Resident Engineer										
The TMP would include components for pedestrians and bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2 Traffic Engineer / Design Engineer / Resident Engineer										
bicyclists along with consideration for the motoring public. As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2 Traffic Engineer / Design Engineer / Resident Engineer Construction										
As well as the items listed for the motoring public, signs would be used, as appropriate, to provide notices of bike and pedestrian closures, detours and other pertinent information. Section 3.6.4.2 Section 3.6.4.2 Section 3.6.4.2 Design Engineer / Construction	bicyclists along with consideration for the motoring public.		Troffic Engineer /							
would be used, as appropriate, to provide notices of blke and pedestrian closures, detours and other pertinent information.	As well as the items listed for the motoring public, signs	Section 3.6.4.2								
pedestrian dosures, detours and other pertinent information.		3000011 0.0.4.2		Construction						
	pedestrian closures, detours and other pertinent information. Temporary access would be provided where possible.		g							



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta: Comp		Remark	Environ Compl	
					Initial	Date		Initial	Date
Visual Aesthetics									
Visual mitigation would consist of adhering to design requirements in consultation with the District 11 DLA and following the Design Guidelines: I-5 NCC Project.	Section 3.7.4	Design Engineer / Landscape Architect	Design						
During project design and construction, the DLA will analyze the visual effects of specific project features, synthesize applicable mitigation measures from this document and the Design Guidelines: I-5 NCC Project, apply those requirements to actual design features in specific locations, and submit proposals to the project design team. The team and DLA will then develop design solutions considered to be reasonable visible mitigation solutions that achieve team consensus, and can in turn be implemented. The DLA also will provide technical assistance during construction and perform mitigation monitoring of all visual mitigation requirements.	Section 3.7.4	Design Engineer / Landscape Architect / Resident Engineer	Design / Construction						
Caltrans will consult with the property owners and/or officials with jurisdiction over recreational areas during project design for potential aesthetic options, as applicable. During the design process, shareholder interaction will continue, guidelines will become more and more specific, locally oriented design details will be added, and a design palette of specific features and products will be developed.	Section 3.7.4	Design Engineer / Landscape Architect / Resident Engineer	Design / Construction						
Mitigation measures that require regular maintenance and are located outside Caltrans right-of-way, such as trees planted along local streets, or measures that require the installation of non-standard equipment within the right-of-way such as pedestrian bridge lighting, can be implemented only if the responsible local government would be willing to maintain them in perpetuity.	Section 3.7.4	Project Management	Design						
 The visual mitigation consists of adhering to the following design requirements. The requirements listed below are arraigned by project feature and include required options in order of effectiveness. One or more of these options would be implemented on applicable project features. SOUNDWALLS Wherever possible, noise barriers should consist of landscaped berms. A retaining wall may be used to avoid constructing a soundwall on top of a berm. This may result in a barrier with a lower profile than a noise berm / wall combination due to the berm's superior sound attenuation qualities. In situations where a tall retaining wall at the toe of slope would create a visual impact to an adjacent property, a berm with a 1:2 slope on the freeway 	Section 3.7.4	Design Engineer / Landscape Architect	Design						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Tas Comp		Remark	Environ Compl	
					Initial	Date		Initial	Date
side that is 6 ft high (minimum) and screening									
shrubs would be used. This size berm should allow									
enough space to provide screening shrubs in front									
of the wall.									
 In areas too narrow to place a planting pocket, the 									
soundwall would be recessed behind the face of									
barrier at a sufficient distance to allow architectural									
features to be included on the face of the soundwall.									
Placing a soundwall directly on top of a concrete									
barrier should be avoided if at all possible.									
 Whenever possible, soundwalls would incorporate 									
planting on both sides. In some cases, retaining									
walls and/or a concrete barrier at the edge of the									
shoulder may be needed to provide the required									
planting space.									
 In some areas, the use of setbacks and return 									
sections in wall layouts would be used.									
 In cases where the right-of-way is narrow, a 									
minimum 5-ft wide planting area would be provided									
between the back of the barrier and the face of the									
soundwall.									
In areas where space for architectural detailing does not exist, vertical concrete sofety berriors									
does not exist, vertical concrete safety barriers would be considered. Vertical barriers add 12 in of									
additional width in which architectural elements									
such as pilasters and wall caps can be included.									
In situations where noise receptors are located about the element of the frequency transport of									
above the elevation of the freeway, transparent									
soundwalls located at the top of slope on the right-									
of-way line or on private property would be used if									
the benefited property owner agrees to maintain									
wall surfaces. Locating walls at higher elevations									
nearer receptors substantially reduces the height of									
walls to achieve "line of sight" noise reductions.									
If possible, translucent materials would be placed									
on top of soundwalls to reduce their apparent height									
and create a greater sense of openness.									
Translucent materials should be placed above									
areas of potential vehicle impact, out of easy reach,									
and should consist of vandal-resistant materials.									
ARCHITECTURAL DETAILING									
 Soundwalls would be designed to be visually 									
compatible with the surrounding community.		Design Engineer /							
Architectural detailing such as pilasters, wall caps,	Section 3.7.4	Landscape Architect	Design						
interesting block patterns, and offset wall layouts		Lanuscape Architect							
would be used to add visual interest and reduce the									
apparent height of the walls. Poured-in-place									1



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Comp		Remark	Environ Compl	liance
					Initial	Date		Initial	Date
integrally colored concrete construction techniques would be encouraged where visual consistency with retaining walls is desired. Enhanced surface materials such as mosaic tile and weathering steel would also be used where appropriate. RETAINING WALLS Retaining walls that follow the contours of the topography and maintain a constant elevation at the top of wall would be used where appropriate. Wall layouts and profiles should be composed of long radius curves, with no tangents or points of intersection. Wall faces should be battered at a 1:6 horizontal / vertical ratio. Walls should be located at mid-slope. This type of wall is visually compatible with surrounding terrain and provides room at the base for a slope that contains landscape screening. Where appropriate, retaining walls over 19.7 ft in height would be divided into separate structures sufficiently offset from one another to create a planting area between the two. Whenever possible, retaining walls would be located at mid slope in cut sections to provide a buffer area for landscape screening between the wall and the freeway.	Reference		_		Comp	leted	Remark	Compl	liance
 Wherever possible, retaining walls would be located at the top of slope in fill sections to provide a buffer area for landscape screening between the wall and the community. In areas where insufficient space exists to include planting buffers between freeway retaining walls and adjacent community features such as frontage roads, the use of viaduct retaining walls would be considered. Viaduct retaining walls would cantilever the roadway to form a wall recess in which spatial articulation and planting can occur. In areas where retaining walls must be placed close to the traveled way, space would be reserved between the wall and the safety barrier to include a 5-ft wide planting pocket. In areas too narrow to place a planting pocket, the retaining wall would be recessed behind the face of barrier at a sufficient distance to allow architectural features to be included on the face of the retaining wall. In areas where space for architectural detailing does not exist, vertical concrete safety barriers 	Section 3.7.4	Design Engineer / Landscape Architect	Design						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Tas Comp		Remark	Environ Comp	
		2.4			Initial	Date		Initial	Date
 would be considered. Vertical barriers add 12 in of additional width in which architectural elements such as mechanically stabilized earth wall panel relief, pilasters, and wall caps can be included. Wall faces would be battered at a 1:6 maximum horizontal / vertical ratio wherever possible to reduce the apparent scale of the wall and give the wall a more natural appearance. The batter also can serve as a barrier safety shape where the base of wall exhibits a smooth surface facing traffic. Alternatives to standard cable rail barrier would be used to complement enhanced wall designs. Options would include integral solid concrete 					Initial	Date		Initial	Date
 parapets or alternative metal materials. Design details are contained in the Design Guidelines: I-5 NCC Project. Architectural features, textures, and integral 									
concrete colors would be used to mitigate the appearance of retaining wall surfaces. Walls would incorporate architectural features such as pilasters and caps to provide shadow lines, provide relief from monolithic appearance, and reduce their apparent scale. Enhanced surface materials such as mosaic tile and weathering steel would also be used where appropriate to meet community design									
 goals. Design details are contained in the Design Guidelines: I-5 NCC Project. Mechanically stabilized earth (MSE) walls can have custom designed panels that include integral color and enhanced surface texture, and a minimum 4-in reveal on each panel. Placement of landscaped slopes, soundwalls, barriers, drainage conveyances, and other roadway features can require special design. 									
Low profile (e.g., Caltrans Type 60S) or see-through (e.g., Caltrans Type 80) safety barriers would be used if at all possible in areas where standard height barriers would diminish views of scenic resources from the freeway.									
OVERCROSSING, UNDERCROSSING, BRIDGE, AND DAR STRUCTURES • Bridge type selection and all other structure design should be consistent with the design themes contained in the Design Guidelines: I-5 NCC Project. Some mitigation features may be new or non-standard and require approvals or design exceptions.	Section 3.7.4	Design Engineer / Landscape Architect	Design						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Comple		Remark	Environ Compl	
		Branon / Gtan	1 11450	Will Took		Date		Initial	Date
Wherever possible, abutments would be short seat abutments placed at the top of slopes. The visual mass of abutments would be minimized as much as									
possible. High cantilever abutments would be used in locations where space does not exist for short seat abutments at the top of a slope.									
 At each overcrossing, bridge abutments would be of the same type to produce a symmetrical 									
appearance. Where overcrossing structures are replaced, high cantilever abutments would be used in lieu of secondary tie-back walls. Temporary tie back walls would be terrain-contoured walls and									
would receive architectural features consistent with permanent walls in the viewshed. Temporary tie-back walls would be removed when overcrossing structures are reconstructed.									
 In locations where retaining walls must be incorporated into abutments, they would be designed as terrain-contoured walls if possible, and located away from the edge of shoulder to allow space for a planted buffer at their base. 									
Slope paving would be enhanced with integral concrete color, texture, and deeply textured facing materials such as veneer block or natural rock.									
 Bridge signage would be designed to visually integrate with bridge architecture. Concrete sign pedestals would be consistent in appearance with bridge design themes. 									
Sidewalks would be provided on both sides of each overcrossing. They would have a 6-ft minimum width on a two-lane structure with a curb-to-curb width of 32 ft or less. On wider streets, both									
sidewalks would be a minimum of 10 ft in width. Sidewalk widths would be selected based on SANDAG regional guidelines (<i>Planning and Designing for Pedestrians</i> , June 2002) and local									
pedestrian design guidelines. Where possible, sidewalks would receive score patterns, surface texture, and/or integral color.									
 Wherever possible, low profile barrier separations between pedestrian and vehicular traffic would be provided on overcrossings where Caltrans policy prohibits or restricts architectural features and 									
pedestrian amenities on or near concrete bridge rails. Sidewalks in these locations would be a minimum of 10 ft in width.									



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Comp	
					Initial Date		Initial	Date
 Pedestrian lighting, enhanced fencing and railings, 								
and other urban amenities would be provided on								
each overcrossing whenever feasible. Local								
agency streetscape design guidelines would be								
continued within Caltrans right-of-way at each								
overcrossing and interchange whenever feasible.								
Container trees located on structures would also be								
provided in locations where the responsible local								
agency has requested them and agreed to maintain								
them in perpetuity.								
 Where possible, bicycle shoulders, lanes, or paths 								
would be provided on both sides of each								
overcrossing. A minimum shoulder width of four ft								
would be provided for Class III facilities.								
 Bridge abutments should be of the same type on all 								
four quadrants to give widened undercrossings a								
symmetrical appearance.								
 Bridge widening should be done using box girder 								
construction wherever possible. Girders should be								
similar in appearance on both sides of the bridge to								
produce a symmetrical appearance.								
 In locations where street widening occurs, tie-back 								
walls should be terrain-contoured walls, and receive								
architectural features consistent with those required								
for retaining walls and with community values and								
goals.								
 Pedestrian sidewalks 10 ft in width (minimum) 								
should be provided at undercrossings on both sides								
of the street wherever possible. In all cases,								
existing sidewalk configurations on local streets								
would be continued across Caltrans right-of-way.								
 Bicycle shoulders, lanes, or paths should be 								
provided at each undercrossing. The type of facility								
would consider regional and local planning goals. A								
minimum shoulder width of 4 ft should be provided								
for Class III facilities.								
 Enhanced pedestrian lighting including bridge soffit 								
lighting should be provided at each undercrossing.								
 Slope paving at undercrossings should be 								
enhanced with deeply textured facing materials								
such as scored veneer block or natural rock to add								
visual interest and deter graffiti.								
 Mitigation measures listed for overcrossing and 								
undercrossing structure symmetry, abutment								
design, tie-back walls, slope paving, sidewalks,								
bicycle routes, and streetscape features would also								



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed Initial Date		Remark	Environmental Compliance	
								Initial	Date
apply to freeway bridges as appropriate.									
 See-through bridge rails such as Caltrans Type 80 									
rail should be used on freeway bridges with views to									
ocean, rivers, lagoons, or other scenic resources,									
unless noise abatement is necessary.									
 Pedestrian overcrossings should be a minimum of 									
15 ft in width.									
 Pedestrian lighting, enhanced fencing, railings, 									
architectural features, and other urban amenities									
should be provided on each pedestrian									
overcrossing. Existing streetscape elements and									
design themes would be continued within Caltrans									
right-of-way.									
 DAR retaining walls should have a 15-ft maximum 									
height, allowing approximately 10 ft of minimum									
vertical clearance under the connecting ramp									
structure.									
 Pedestrian and bicycle traffic on existing 									
overcrossings to be converted to DAR									
overcrossings should be routed to a separate									
pedestrian overcrossing structure in the immediate									
vicinity, if possible.									
 On structures where pedestrians are present, 									
sidewalks should be 15 ft in width on each side.									
Bridge barriers, fences, and sidewalks should be									
designed to provide standard stopping sight									
distance at DAR termini to enable pedestrians to be									
visible to drivers. Barrier separations between									
pedestrian and vehicular traffic should be provided if									
Caltrans policy requires bridge barriers to adhere to									
freeway crash standards.									
 Bicycle shoulders, lanes, or paths should be provided on both sides of each DAR overcrossing 									
open to non-vehicular traffic. The type of facility									
would consider regional and local planning goals. A									
minimum shoulder width of 4 ft should be provided									
for Class III facilities.									
 Pedestrian lighting, enhanced fencing and railings 									
and other urban amenities should be provided on									
each DAR local street overcrossing and be									
consistent with local values and goals. Existing									
streetscape elements and design themes should be									
continued within Caltrans right-of-way at each DAR									
overcrossing. Local streetscape guidelines should									
be followed. Enhancements or enhancement									
features such as decorative lighting and street									



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed		Remark	Environmental Compliance	
					Initial	Date		Initial	Date
furniture would be incorporated if local agencies accept permanent maintenance responsibility.									
Container trees located on structures should also be									
provided in locations where the responsible local									
agency has requested them and agreed to maintain									
them in perpetuity.									
FREEWAY INTERCHANGES									
 Continuity of street and pedestrian facilities should be maximized wherever possible by converting 									
existing non-stop freeway ramp entries and exits to									
ramp termini placed perpendicular to the street.									
The use of roundabouts should also be considered									
to create a more balanced relationship between									
interchange and community by decreasing required									
roadway width. • Establishment of a continuous pedestrian realm on									
both sides of local streets as they pass through the									
interchange should be accomplished by utilizing									
design features such as street trees, pedestrian									
lighting, landscaped parkways located between									
sidewalk and curb, enhanced sidewalk paving that									
continues across freeway ramps, and islands of									
refuge in street and ramp medians. Pedestrian and transit facilities should conform to SANDAG									
Pedestrian Design Guidelines and any applicable									
local streetscape design standards and guidelines.	0	Design Engineer /	Danima						
Urban design features such as benches, bollards	Section 3.7.4	Landscape Architect	Design						
(short posts to divert or exclude automobiles),									
directional signage, and trash receptacles should									
also be included as appropriate. Specific guidelines and/or specific interchange streetscape plans were									
developed as part of Design Guidelines: I-5 NCC									
Project.									
Bicycle facilities should be preserved or upgraded to									
conform to the San Diego Regional Bike Plan,									
applicable local standards, and General Plan									
circulation element goals.									
 Interchange landscaping should reflect the visual character and goals of its locality. Enhanced 									
interchange landscaping should be considered in									
cases where the responsible local agency would									
provide maintenance in perpetuity. Entry features									
should be included as transitional visual elements									
into local communities where appropriate.									
Traditional decorative entry signage with text should									
not be used. Specific interchange landscape	<u> </u>		1	L		<u> </u>			



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed		Remark	Environmental Compliance	
				1 2 2	Initial	Date		Initial	Date
themes may be developed as part of the Design									
Guidelines: I-5 NCC Project.									
 Detention basins located at freeway interchanges or 									
in areas of high visibility should incorporate the									
following design features. Basins would be located									
at least 10 ft from clear recovery areas whenever									
possible to allow landscape screening to be installed.									
Basins should appear to be natural landscape									
features such as dry streambeds or riparian areas.									
Where possible they should be shaped in an									
informal, curvilinear manner, incorporate slope									
rounding, variable gradients, and be similar to the									
surrounding topography to deemphasize a defined									
outer edge. Maintenance access drives should be									
located in unobtrusive areas away from local streets									
and would consist of inert materials or herbaceous									
groundcover that is visually compatible with the									
surrounding landscape. All visible concrete									
structures and surfaces should be of special design									
and adhere to the Design Guidelines: I-5 NCC									
Project. Rock slope protection would consider use of									
aesthetically pleasing whole material of various									
sizes. Standpipes and other vertical appurtenances									
should be placed in unobtrusive locations and be									
painted an unobtrusive color. Where possible, bio-									
swales should be located in non-obtrusive areas, be									
designed to appear as natural features, and									
incorporate applicable mitigation measures listed									
above for detention basins.									
 The use of Caltrans standard freeway 									
appurtenances on local streets should be avoided									
or minimized wherever possible. Crash cushions,									
metal beam guardrail, end anchor assemblies,									
concrete barriers, sign standards, light standards,									
signal standards, and chain-link fencing are									
examples of such features that are addressed in the									
Design Guidelines: I-5 NCC Project. The use of									
access control fencing at interchanges should be									
minimized and located in unobtrusive locations									
when its use is necessary. Electrical control									
cabinets and other utility boxes should be located in									
unobtrusive locations away from sidewalks									
wherever possible. Raised medians should be used									
wherever possible to allow for pedestrian islands of									
refuge, create a visual break in the ground plane,									
and provide space for street tree planting.									1



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed		Remark	Environmental Compliance	
					Initial	Date		Initial Date	
MANCHESTER AVENUE TRANSIT CENTER Site amenities for transit users should be provided; such as covered bus shelters, pedestrian lighting, benches, litter receptacles, tree grates, bollards, and bicycle racks. Landscaping and enhanced pedestrian paving would be an integral part of the station features. A sidewalk 10 ft in width should be provided along the west side of the transit center access road from the bus platform to Manchester Avenue. It should be located 6 ft from the back of curb to create a landscaped parkway.	Section 3.7.4	Design Engineer / Landscape Architect	Design						
 The Design Guidelines: I-5 NCC Project contain a landscape concept plan for the project. In general, freeway landscaping would utilize California native plants. The landscape design would be consistent with the character of adjacent community landscape. In communities that are characterized by ornamental landscaping, freeway landscaping would include native plants with an ornamental appearance in an enhanced design. Trees, shrubs, and groundcover would be installed. In less-developed areas of the corridor, drought-tolerant native trees and shrubs would be planted in an informal design. Areas adjacent to native habitat would receive native plantings and hydroseed. Landscape plantings adjacent to habitat would be designed in consultation with the District Biologist. Landscaped areas would be irrigated with an underground automatic system. Reclaimed water would be used wherever possible. A thorough weed abatement/exotic removal program would be implemented prior to hydroseeding and continue through plant establishment. All landscaped areas will have underground automatic sprinkler systems. Since the project would result in the loss of a majority of existing landscaped roadside areas, steps should be taken to create new areas for mitigation replacement planting within the freeway facility at the edge of shoulder, between concrete median and separator barriers, or between barriers and walls wherever the available width allows. Minimum widths for planting are 2 ft between barrier and wall, and 6 ft between median or separator barriers. Where possible, safety barriers at the edge of shoulder should facilitate tree and shrub planting in roadside areas that are too narrow to allow standard clear recovery area planting setbacks to be used. 	Section 3.7.4	Design Engineer / Landscape Architect / Biologist	Design						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta: Comp		Remark		nvironmental Compliance	
					Initial	Date		Initial	Date	
Existing median oleanders would be preserved										
wherever possible. Since freeway widening would										
disturb the roots of existing plants, the following										
measures would be implemented. A new automatic										
irrigation system would be installed in the median										
and the oleanders would be irrigated and fertilized										
on a regular basis before, during, and after project										
construction. The oleanders would be watered,										
fertilized, and pruned under the direction of a										
certified arborist prior to the commencement of										
median grading. The oleanders would remain in										
place undisturbed during construction. Existing										
non-vigorous oleanders would be replaced with new										
oleanders planted from 5-gallon containers at the										
direction of the Resident Engineer. Oleanders that										
do not survive during construction or plant										
establishment would be replaced using oleanders										
planted from containers. Existing weeds and										
volunteer plants within the median would be										
removed. A plant establishment period of one year										
would be provided. Following plant establishment,										
a mitigation monitoring period of three years would										
be implemented to ensure plant survival.										
In locations where freeway widening brings traffic										
into close proximity to parallel local streets such as										
Ida Avenue in Solana Beach, Villa Cardiff Drive,										
Devonshire Drive, Orpheus Avenue, and Piraeus										
Street in Encinitas; Avenida Encinas in Carlsbad;										
and Brooks Street, Garfield Street, and Buena										
Street in Oceanside, landscape buffers would be										
created between the freeway and street. Buffers would include elements such as street trees and										
shrubs, sidewalks, and solid screen walls for access										
control. Inclusion of some buffers may require local										
street widths to be adjusted. Implementation of this										
mitigation measure is contingent on local agency										
approval and commitment to maintain the										
streetscape buffer in perpetuity.										
Slopes would be graded 1:2 or flatter (vertical /										
horizontal) to support planting and irrigation.										
Steeper slopes may be possible if they are serrated										
and contain benches wide enough to accept plants										
from #15 containers. Grading should utilize										
techniques such as slope rounding, slope sculpting,										
and variable gradients to approximate the										
appearance of natural topography.										
Implement signage, lighting, and miscellaneous										
- Imploment signage, lighting, and miscellaneous		l	<u> </u>	<u> </u>					1	



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta: Comp		Remark	Environ Compl	
					Initial	Date		Initial	Date
freeway feature mitigation designs as detailed in the									
Design Guidelines: I-5 NCC Project.									
 Lighting and signage pedestals on structures should 									
be placed at pilasters or be incorporated in other									
architectural features, where possible.									
 Freeway lighting and signage should conform to the 									
Design Guidelines: I-5 NCC Project, including									
directing lighting away from sensitive habitats and									
reducing glare.									
Concrete lighting and signage pedestals should be									
designed in such a way that vertical barrier									
transitions are not required.									
Electrical and signal equipment at ramp termini									
should be placed in visually unobtrusive locations.									
Median barriers would receive integral concrete action and the application of a basin condition.									
color and the application of a heavy sandblast									
texture to barrier surfaces visible from the freeway. Heavy sandblast texture would create an irregular									
surface relief to a depth of 3/8 in.									
Narrow landscape areas beyond the gore would be									
paved for worker safety. Paving would incorporate									
a tan color and rough surface texture consistent									
with corridor design themes. Concrete vegetation									
control would be a tan color.									
Signage with movable elements or self-illuminated									
features such as changeable message signs would									
be excluded from viewsheds containing scenic									
resources if at all possible. The DLA would assist in									
the placement of all such signage.									
 Access control fencing would be placed in visually 									
unobtrusive locations of interchanges and bridges									
where possible. It is recommended that it be of									
special design and consist of enhanced materials									
where appropriate and maintained by the									
responsible local agency in perpetuity.									
Where possible, retaining walls and soundwalls									
near right-of-way boundaries would be designed in									
such a way that access control fencing would not be needed. The "dead" spaces that occur between									
walls and fences would be avoided if at all possible.									
 Concrete interceptor ditches would not be placed 									
adjacent to residential property, at interchanges, or									
adjacent to residential property, at interchanges, or adjacent to pedestrian use areas if at all possible.									
Alternatives such as subterranean drainage placed									
below finish grade or planted geo-reinforced									
drainage surfaces would be used.									
Detention basins located in areas visible to the									
Statement and the statement of the state		L		<u> </u>	ı	1		J	1



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Tas Comp		Remark	Environ Comp	
					Initial	Date		Initial	Date
 public would incorporate the same mitigation features required for basins located at interchanges. Bio-swales and linear drainage ditches would be designed to appear as natural features and incorporate applicable mitigation measures listed above for detention basins. Concrete drainage devices located in areas of high visibility would be located, designed, and colored to be unobtrusive in appearance. Soft surface or segmented hard surface plantable alternatives to concrete ditches and rock slope protection would be utilized in all project areas visible to the public, where possible. The use of pervious concrete for storm water pollution prevention would be considered. Project features such as interceptor ditches, inlet aprons, gutters, maintenance access roads, maintenance vehicle pullouts, and parking lots could consist of pervious concrete and perhaps reduce the project footprint. Real estate parcels in whole or in portion that are purchased for freeway widening but not required for use as permanent State right-of-way would be considered as potential opportunities for community pocket parks or public open space. This would be considered at the request of the responsible local agency and relinquished to them to maintain in 		Branch / Stan	rilase	WILLIAM					
 perpetuity. Existing overhead utilities that are located near the freeway and requiring relocation due to freeway widening would be relocated underground where possible. 									
Cultural Resources									
Caltrans will undertake efforts to avoid causing impacts to archaeological sites. Prior to construction, a Cultural Resources Treatment Plan will be developed. This plan will include an Archaeological Monitoring Area (AMA) Action Plan and an ESA Action Plan. Combined, these plans would delineate AMA and ESA locations where a "qualified" archaeological monitor and a Native American monitor will be present during construction, identify the individuals involved, and their roles and responsibilities.	Section 3.8.4	Cultural	Pre Construction						
AMA and ESAs will be depicted on the design / construction plans. A letter will be sent to the Resident Engineer's file, along with a copy of the AMA and ESA Action Plan. The archaeologist and Native American monitor would be present at the pre-construction meeting.	Section 3.8.4	Design / Cultural / Construction	Pre Construction						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Compl	
					Initial Date		Initial	Date
The archaeologist and Native American monitor will work with Caltrans Construction Liaison to accurately delineate the boundaries of those sites requiring the establishment of ESAs. Fencing will be placed around ESA sites, as appropriate. ESA sites will be avoided by all construction activity.	Section 3.8.4	Cultural / Environmental Stewardship	Pre Construction / Construction					
A "qualified" archaeological monitor and a Native American monitor will be present at AMA and ESA locations during construction activities.	Section 3.8.4	Cultural / Construction	Construction					
The construction contract will contain language related to unanticipated discoveries should they be made during construction, including diverting activities away from such finds until an archaeologist could assess their nature and significance. If unanticipated discoveries occur, Section 106 consultation with the SHPO would be reopened, if appropriate. If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area would be diverted until a qualified archaeologist can assess the nature and significance of the find.	Section 3.8.4	Design / Cultural / Construction	Construction					
If unanticipated human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner would be contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the Coroner would notify the Native American Heritage Commission (NAHC), who would then notify the Most Likely Descendant (MLD). At the same time, the person who discovered the remains would contact the District 11 Chief of the Environmental Resources Branch so that they could work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 would be followed, as applicable.	Section 3.8.4	Design / Cultural / Construction	Construction					
Hydrology and Water Quality								
The structures over Los Peñasquitos Creek would be designed to entirely span the floodplain.	Section 3.9.4	Design Engineer	Design					
The replacement of the Sorrento Valley Road Culvert would remove an existing constriction point in Carmel Valley Creek and lower the base floodplain.	Section 3.9.4	Design Engineer	Design					
The replacement of the Batiquitos Lagoon Bridge would reduce an existing constriction point in the lagoon and lower the base floodplain.	Section 3.9.4	Design Engineer	Design					
Standard engineering practices would be used, where feasible, to facilitate drainage.	Section 3.9.4	Design Engineer	Design					
The area affected by construction would be limited through utilization of barriers or fences to protect sensitive areas.	Section 3.9.4	Design Engineer / Resident Engineer	Design / Construction					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase		Task Completed Remark			mental iance
				Initia	al Date		Initial	Date
ESAs would be designed to demarcate and protect floodplain habitats.	Section 3.9.4	Design Engineer / Resident Engineer	Design / Construction					
Best Management Practices (BMPs) would be implemented to control erosion and runoff and address potential water quality impacts during the planning and design, construction, and operational stages.	Sections 3.9.4 and 3.10.4	Design Engineer / Resident Engineer	Design / Construction					
Caltrans would implement a program, defined by the Statewide Storm Water Management Plan (SWMP), to reduce the discharge of pollutants to the storm water drainage systems that serve the highway and highway-related properties, facilities, and activities.	Section 3.10.4	Design Engineer / Resident Engineer	Design / Construction					
Complete a Storm Water Data Report (SWDR), which summarizes the storm water decisions made by the Project Development Team, at the beginning of the project and update the SWDR as the project progresses through design. In the final SWDR, include exhibits showing tributary drainage areas, percentages of "treatment," water quality impairments and types of design pollution prevention, construction and maintenance BMPs that will be incorporated into the project.	Section 3.10.4	Design Engineer	Design					
Short-term impacts to water quality during the construction phase would be prevented / minimized through the use of Construction Site BMPs, as required under the Construction General Permit. A combination of erosion and sediment control BMPs would be used to address both storm water and non-storm water discharges during construction. Construction Site BMPs that would be implemented as appropriate for the project cover the following categories: • Temporary Soil Stabilization • Temporary Sediment Control • Wind Erosion Control • Tracking Control • Non-Storm Water Management • Waste Management and Materials Pollution Control	Section 3.10.4, Caltrans Construction Site BMPs Manual	Design Engineer / Resident Engineer	Design / Construction					
More information on the various types of BMPs covered under each one of these categories is found in Caltrans Construction Site BMPs Manual. Long term impacts during Caltrans operation and								
maintenance of its facilities would be prevented / minimized through the use of Design Pollution Prevention (DPP) BMPs, Treatment BMPs, and Maintenance BMPs.	Section 3.10.4	Design Engineer / Resident Engineer	Design / Construction					
Maintenance BMPs would be ongoing for the life of the facility, and are required to be conducted in accordance with the Caltrans Storm Water Quality Handbook, Maintenance Staff Guide (Guide).	Section 3.10.4	Design Engineer / Resident Engineer / Operations	Design / Construction / Post- construction					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environmer Compliand	
					Initial Date		Initial	Date
The peak flow rate, runoff velocities, and erosive characteristics of the soils in the area would be assessed with regard to downstream watercourses to determine potential impacts and appropriate mitigation, if required.	Section 3.10.4	Design Engineer	Design					
The project would preserve the existing vegetation outside the work areas, stabilize slopes with vegetative cover, and keep the total paved area to a practical minimum.	Section 3.10.4	Design Engineer / Resident Engineer	Design / Construction					
DPP BMPs would be implemented to prevent downstream erosion, stabilize disturbed soil areas, and maximize vegetated surfaces consistent with Caltrans policies. The selection of the specific DPP BMPs is an iterative process that begins at the planning stages and is refined during the design phase. DPP BMPs that would be implemented as appropriate for the project include: • Consideration of Downstream Effects Related to Potentially Increased Flow • Preservation of Existing Vegetation • Concentrated Flow Conveyance Systems • Ditches, Berms, Dikes, and Swales • Overside Drains • Flared Culvert End Sections • Outlet Protection / Velocity Dissipation Devices • Slope / Surface Protection Systems • Vegetated Surfaces • Hard Surfaces	Section 3.10.4	Design Engineer / Resident Engineer	Design / Construction					
Review and propose low impact development (LID) features throughout the project footprint. Final selection will be made during final design once drainage, grading and other design features are determined and used as a basis for feasibility and siting locations. Features that function as LID measures include, but are not limited to: • Surface vegetation, such as biofiltration swales and strips • Soil amendments, such as compost and surface roughening • Subsurface storage, such as dry-wells, infiltration trenches, or swales underlain with permeable soil layers • Small detention areas, such as cisterns, traps, and check dams • Pervious materials, such as paving stone and porous concrete, when used in lieu of impervious materials at locations outside the highway prism • Disconnected drainage that relies upon overland flow rather than pipe networks to convey runoff to discharge locations	Section 3.10.4	Design Engineer	Design					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Compl	
					Initial Date		Initial	Date
 Contour grading, grading that follows natural flow paths and terrain with an emphasis upon slope rounding and gradual elevation changes. 								
In conformance with the recently adopted statewide permit (Order 2012-0011-DWQ effective date of July 1, 2013), conduct a risk-based approach to ensure the project would not cause a decrease in lateral (bank) and vertical (channel bed) stability in receiving stream channels. Assess preproject channel stability and implement mitigation measures that are appropriate to protect structures and minimize stream channel bank and bed erosion. Include discussion of hydromodification as well as LID and other BMPs in the SWDR.	Section 3.10.4	Design Engineer	Design					
Treatment BMPs are required under the SWMP to prevent or minimize the long-term potential impacts from Caltrans facilities or activities. The following approved treatment BMPs are considered to be technically and fiscally feasible for all of the build alternatives: • Biofiltration Systems • Infiltration Devices • Detention Devices • Dry Weather Flow Diversions • Gross Solid Removal Devices • Multi-Chambered Treatment Train • Wet Basin • Traction Sand Traps • Media Filters	Section 3.10.4							
Preliminary locations of some of the treatment BMPs are shown on the Project Features Maps (<i>Figures 2-3.3</i> , <i>Sheets 1</i> through <i>68</i>). If the proposed project proceeds to the design phase, the locations of these treatment BMPs would be further evaluated to determine feasibility in relation to right-of-way limitations, environmental constraints, or hydraulic capacity. In areas where treatment BMPs have been identified, but cannot be incorporated due to above mentioned reasons, the equivalent minimum would be identified and implemented. In addition, vegetation would be maximized and every effort would be made to ensure the successful establishment of landscaping and erosion control throughout the project limits. The project would also consider any future treatment BMPs that might be approved by Caltrans from the ongoing research and monitoring program.		Design Engineer / Landscape Architect	Design					
The District Erosion Control Specialist, in coordination with the project Biologist and Landscape Architect, would determine the appropriate planting / seeding mix to ensure	Section 3.10.4	Design Engineer / Landscape Architect / Biologist	Design / Construction					

Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Compl	
					Initial Date		Initial	Date
that proposed vegetation is consistent with existing vegetation within the corridor, as well as any specific requirements by local entities.								
Minimization measures would be implemented during construction at crossings over six designated "navigable" waterways. Minimization measures at waterways can typically include, but are not limited to: flagging the perimeter of the proposed impact area to restrict access; training all contractors and construction personnel on sensitive resources, such as navigable vessel use; scheduling construction outside of breeding season(s) or conducting pre-construction surveys for presence / absence of sensitive species; restricting equipment, material storage, and staging to disturbed areas; designing the project to avoid / reduce storm water impacts where feasible, or otherwise control sediment with silt fencing, gravel bags, hay bales, and fiber rolls; controlling fugitive dust; restricting changing oil and/or refueling to designated areas; constructing velocity dissipation structures at drainage outlets; directing all lighting to the construction area during night time construction; and temporarily diverting water around the work area by use of sandbags, gravel dams, or cofferdams.	Section 3.10.4	Design Engineer / Biologist / Resident Engineer	Design / Construction					
Geology / Soils / Seismic / Topography								
For preliminary design purposes, soils at all the lagoons and river valleys would be assumed to be predisposed to liquefaction.	Section 3.11.4	Design Engineer	Design					
The use of large retaining structures to accommodate embankment widening over the lagoons would be avoided when possible.	Section 3.11.4	Design Engineer	Design					
Drainage for proposed improvements would be constructed in accordance with Caltrans Highway Design Manual.	Section 3.11.4	Design Engineer / Resident Engineer	Design / Construction					
Impacts to water quality would be minimized by directing surface runoff away from the top of slopes, and also by not allowing runoff to discharge over the top of slopes.	Section 3.11.4	Design Engineer / Resident Engineer	Design / Construction					
Surface water would be conveyed offside by appropriate erosion-reducing devices.	Section 3.11.4	Design Engineer / Resident Engineer	Design / Construction					
Where groundwater is present, subsurface drainage devices would be installed, if applicable.	Section 3.11.4	Design Engineer / Resident Engineer	Design / Construction					
Settlement waiting periods would be employed at all soft soil locations before establishment of the final grade.	Section 3.11.4	Resident Engineer	Construction					
Caltrans personnel would be present during project construction to observe all cuts, foundation subgrade, and embankment subgrade to assure that all appropriate provisions are enforced. If unanticipated subsurface conditions are encountered, a geotechnical representative	Section 3.11.4	Resident Engineer	Construction					

Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta Comp	sk oleted	Remark		nmental liance
					Initial	Date		Initial	Date
would be notified to make additional recommendations to the Resident Engineer, who in turn would direct the contractor. Instrumentation for measuring settlement or slope distress, and periodic surveying for ground movement, would be included during construction in areas									
where the potential for ground movement or failure exists.									
Grading and roadway work would be performed in accordance with Caltrans Standard Plans and Specifications.	Section 3.11.4	Resident Engineer	Construction						
To avoid surface erosion, which may supply an unacceptable sediment load to the watershed, temporary slopes would not be left unprotected throughout the wet season.	Section 3.11.4	Resident Engineer	Construction						
Concentrated flows would not be allowed on slopes.	Section 3.11.4	Resident Engineer	Construction						
Appropriate construction scheduling, soil trackifiers, geosynthetic mats, and plastic sheeting are some of the techniques that may be used to avert excessive slope erosion.	Section 3.11.4	Resident Engineer	Construction						
Paleontology									
A qualified principal paleontologist (M.S. or Ph.D. in paleontology or geology familiar with paleontological procedures and techniques) would be retained to be present at pre-grading meetings to consult with grading and excavation contractors.	Section 3.12.4	Paleontologist	Construction						
A paleontological monitor, under the direction of the qualified principal paleontologist, would be on site to inspect cuts for fossils at all times during original grading involving sensitive geologic formations.	Section 3.12.4	Paleontological Monitor	Construction						
When fossils are discovered, the paleontologist (or paleontological monitor) would recover them. Construction work in these areas would be halted or diverted to allow recovery of fossil remains in a timely manner.	Section 3.12.4	Paleontologist / Paleontological Monitor	Construction						
Fossil remains collected during the monitoring and salvage portion of the mitigation program would be prepared, sorted, and cataloged.	Section 3.12.4	Paleontologist / Paleontological Monitor	Construction						
Once the grading plan is finalized, the types, depth, and locations of the construction activities would be analyzed to finalize the Paleontological Mitigation Monitoring Plan (PMMP), prepared by a qualified principal paleontologist.	Section 3.12.4	Design Engineer / Paleontologist	Design						
A Paleontological Mitigation Monitoring Report (PMMR) would be prepared by a qualified principal paleontologist to document the results of the mitigation program, including construction monitoring, fossil salvage laboratory preparation of salvaged specimens, curation of prepared specimens, and storage of curated specimens.	Section 3.12.4	Paleontologist	Post- construction						
Although all fossils collected remain the property of the	Section 3.12.4	Paleontologist	Post-						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta: Comp	RAMar	'V	nmental oliance
			1 11000		Initial	Date	Initial	Date
State, the collection must be properly curated at an approved facility (preferably local to the project location) and preserved for future researchers. A complete set of field notes, geologic maps, stratigraphic sections, and a copy of the final report about the gurated with the fossile			construction					
copy of the final report should be curated with the fossils. Hazardous Waste / Materials								
Wherever possible, the project alternatives follow the existing I-5 alignment to avoid and/or minimize impacts from hazards and hazardous materials. In particular, avoidance of the gasoline stations and soil excavation at Manchester Avenue, Birmingham Drive, Palomar Airport Road, Tamarack Avenue, and Carlsbad Village Drive would be considered.	Section 3.13.4	Design Engineer	Design					
Soil excavated from agricultural land and nurseries may require reuse or proper off-site disposal, with further testing necessary at Manchester Avenue, between Birmingham Drive and Palomar Airport Road, and at Cannon Road.	Section 3.13.4	Design Engineer / Resident Engineer	Design / Construction					
Soils from landfills near Piraeus Street may be reused or disposed as non-hazardous material at the appropriate landfill location; however, the Maxson Street site would be avoided. Further hazardous waste investigation may be necessary on individual parcels to be acquired.	Section 3.13.4	Design Engineer / Resident Engineer	Design / Construction					
Environmental Engineering staff would be kept informed of parcel takes and changes in scope or design since further hazardous waste investigation may be necessary on individual parcels to be acquired.	Section 3.13.4	Design Engineer / Resident Engineer	Design / Construction					
Since there are chemical constituents present in soil and groundwater within the I-5 corridor, soil excavation activities would be performed under the guidelines of a site-specific Soil Management Plan and Health and Safety Plan.	Section 3.13.4	Design Engineer / Resident Engineer	Design / Construction					
The Department of Toxic Substances Control (DTSC) lead variance would be followed for ADL soil excavated in the median. Soil in the median along I-5 to a depth of two ft is hazardous with regard to soluble ADL concentrations. This soil may be reused on site in accordance with a DTSC lead variance issued to Caltrans. If this criterion cannot be met, then disposal of ADL soil would be a necessary at a Class I landfill. Soil excavated as a whole along the shoulders may be reused as clean material with regard to ADL, unless soil adjacent to the shoulder is segregated from the whole. The DTSC lead variance will apply for segregated soil from the shoulder.	Section 3.13.4	Design Engineer / Resident Engineer	Design / Construction					
A NPDES permit would be obtained, which would include measures for impacts to service stations. If soil from abutment excavations at Via de la Valle, Birmingham Drive, Brooks Street, Palomar Airport Road, Carlsbad Village	Section 3.13.4	Design Engineer / Resident Engineer	Design / Construction					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta Comp		Remark		nmental liance
					Initial	Date		Initial	Date
Drive, or Mission Avenue would be exported, however, the soil may require further characterization for petroleum hydrocarbons, volatile organic compounds, or semi-volatile organic compounds to evaluate the proper disposal method.									
Although investigation near the Olympus and Maxson Street landfills did not encounter wastes associated with the landfills, it is recommended that widening activities in the vicinity of these landfills be moved to the west to avoid the landfill sites. If parcels were acquired at these landfill locations, excavated soil would require further characterization to evaluate the proper disposal method.	Section 3.13.4	Design Engineer	Design / ROW Acquisition						
If soil from locations containing farmland or nurseries is exported, further characterization for pesticide / herbicides would be warranted to evaluate the proper disposal method.	Section 3.13.4	Design Engineer / Resident Engineer	Design / Construction						
Because historical chemical spill locations along I-5 are unknown, a contingency should be written into the construction contract to address this potential hazardous waste issue.	Section 3.13.4	Design Engineer	Design						
Asbestos and lead paint may be in structures demolished during construction and must be handled and disposed of properly.	Section 3.13.4	Resident Engineer	Construction						
Treated wood waste in sign and guardrail posts must be handled and disposed of properly.	Section 3.13.4	Resident Engineer	Construction						
Air Quality									
 Air Quality measures to minimize construction-related emissions include: The construction contractor would comply with Caltrans' Standard Specifications in Section 14(2010). Section 14-9.01 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment as provided in CA Code of Regulations Title 17, Section 93114. Route and schedule construction traffic to avoid peak travel times as much as possible, to reduce congestion and related air quality impacts caused by idling vehicles along local roads. 	Section 3.14.4	Resident Engineer	Construction						
 Construction-related impacts from fugitive dust, PM₁₀, and PM_{2.5} would be minimized by the 	Section 3.14.4	Resident Engineer	Construction						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta Comp		Remark	Environ Compl	
					Initial	Date		Initial	
following strategies: Section 14-9.02 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18. Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emission or at the right-of-way line, depending on local regulations. Spread soil binder on any unpaved roads used for construction purposes, and all project construction parking areas. Wash off trucks as they leave the right-of-way as necessary to control fugitive dust emissions. Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities. Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic. Cover all transported loads of soils and wet materials prior to transport, or provide adequate freeboard (space from the top of the material to the top of the truck) to minimize emission of dust (particulate matter) during transportation.	Reference	-			Comp	leted	Remark	Compl	
 Promptly and regularly remove dust and mud that are deposited on paved, public roads due to construction activity and traffic to decrease particulate matter. Install mulch or plant vegetation as soon as practical after grading to reduce windblown particulate in the area. Be aware that certain methods of mulch placement, such as straw blowing, may themselves cause dust and visible emission issues, and may pand to use centrals such as democrated straw. 									
need to use controls such as dampened straw. To minimize exposure to diesel particulate emissions, the following measures would be implemented: • Locate equipment and materials storage sites as far away from residential and park uses as practical. Keep construction areas clean and orderly. • Near sensitive air receptors, establish	Section 3.14.4	Design Engineer / Resident Engineer	Design / Construction						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Tas Compl		Remark		mental liance
					Initial	Date		Initial	Date
Environmentally Sensitive Areas or their equivalent within which construction activities involving the extended idling of diesel equipment would be prohibited, to the extent feasible.									
Noise									
 The following control measures would be implemented in order to minimize noise disturbances at sensitive receptors during periods of construction: All equipment items would have manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational All construction equipment would be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices Idling equipment would not be allowed A construction noise-monitoring program would be implemented to limit impacts Noisier operations would be planned during times least sensitive to receptors Rests between construction activities would be planned so that noisy activities would be followed by more quiet activities Noise levels would be kept relatively uniform and impulsive noises avoided Good public relations would be maintained with the community to minimize objections to the unavoidable construction impacts. Frequent activity updates of all construction activities would be provided. Ongoing communication would occur between the Caltrans Resident Engineer, the Oceanside Unified School District, and Oceanside High School. 	Section 3.15.14	Design Engineer / Resident Engineer	Design / Construction						
Design and install noise abatement at the locations recommended in the Final NADR.	Section 3.15.14	Design Engineer / Resident Engineer	Design / Construction						
Energy									
 Efforts to minimize energy consumption during construction include: Public awareness campaigns to encourage carpooling and commuting during non-peak traffic hours The recycling of materials, such as, damaged metal beam / guardrail, light standards, pipes, bridge materials, and/or used rebar salvaged as metal scrap The use of recycled materials, such as asphalt and 	Section 3.16.14	Design Engineer / Public Information Officer / Resident Engineer	Design / Construction						



Task	and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta Comp		Remark	Environ Compl	
						Initial	Date		Initial	Date
•	concrete roadway materials through creation of road-base materials after crushing and grinding Reuse of soil and vegetation where practicable The salvage of material such as roadside sign posts, and sign structures, chain link fence fabric, lighting standards, and/or traffic signal standards and appurtenances The use of energy-efficient construction vehicles									
opera	ollowing measures relevant to energy use during tions are consistent with other discussions in this EIR/EIS: Incorporate bicycle-friendly intersections at interchange ramps, in coordination with the responsible local jurisdictions Incorporate low water use landscaping Develop and implement a comprehensive TMP to increase driver awareness, ease congestion, and minimize delay during construction (see Traffic measures.)	Section 3.16.14	Design Engineer / Landscape Architect / Traffic Engineer / Resident Engineer	Design / Construction						
Natur	al Communities									
	To minimize impacts to all habitats, 2:1 slopes will be used along the freeway and retaining walls will be used on cut slopes.	Section 3.17.3 and Appendix O	Design Engineer	Design						
BO2.	No riprap will be used in channel bottoms for bridge construction to minimize impacts to aquatic habitats.	Section 3.17.3 and Appendix O	Design Engineer	Design						
BO3.	Retaining walls 6 feet or lower in height will be used as feasible on fill slopes within lagoons to minimize impacts to aquatic habitats from the bike / pedestrian path. Retaining walls will also be used as feasible on cut slopes through coastal mesas to minimize project impacts to sensitive upland habitats.	Section 3.17.3 and Appendix O	Design Engineer	Design						
BO4.	The I-5 lagoon bridges will be lengthened to accommodate a channel bottom width of at least 261, 134, and 105 feet at San Elijo, Batiquitos, and Buena Vista Lagoons, respectively, consistent with the recommendations in the lagoon bridge optimization studies (Moffatt & Nichol 2012a and b, Everest International Consultants, Inc. 2012).	Appendix O	Design Engineer	Design						
BO5.	Project work within open water habitat in the San Luis Rey River in occupied goby critical habitat will be minimized to approximately 500 square feet of permanent impacts from bridge pilings, 0.3 acre of bridge shading, and 0.2 acre of temporary impacts. Cofferdams at bridge footings will be used such that project construction will not require diversion or	Section 3.17.3 and Appendix O	Design Engineer / Resident Engineer	Design / Construction						



Task a	and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Comp	
						Initial Date		Initial	Date
	relocation of the active channel. The project will not conduct actions that will result in the breach of seasonal San Luis Rey River estuary berms. Construction berms will not be used within the San Luis Rey River and all lagoons to minimize impacts on the active channel and avoid sedimentation impacts.								
BO6.	Project landscaping will follow the provisions set forth in Executive Order 13112, which mandates preventing the introduction of and controlling the spread of invasive plant species on highway Right-of-ways. No invasive species listed in the National Invasive Species Management Plan, the State of California Noxious Weed List, or the California Invasive Plant Council's (Cal-IPC) Invasive Plant Inventory list will be included in the landscaping plans for the proposed project. Landscaping will not use plants that require intensive irrigation, fertilizers, or pesticides adjacent to preserve areas, and water runoff from landscaped areas will be directed away from adjacent native habitats and contained and/or treated within the development footprint.	Section 3.22.4 and Appendix O	Design Engineer / Landscape Architect / Biologist	Design					
BO7.	Permanent project lighting will be of the lowest illumination necessary for safety and will be directed toward the roadway, Park and Rides, and other project facilities, and away from sensitive habitats. Light glare shields will be used to reduce the extent of illumination into sensitive habitats. Lighting adjacent to lagoons will be fitted with bird control spikes to ensure that raptors will not be able to use lighting as a perch to prey on listed bird species. With the exception of pathway lighting for the North Coast (NC) Bike Trail, there will be no night lighting of trails within lagoons, wildlife corridors, and sensitive habitat areas. Pathway lighting for the NC Bike Trail will be of the lowest illumination necessary for safety and will be designed to avoid light spill into adjacent sensitive habitats and wildlife movement areas. Caltrans will coordinate with the CFWO regarding the design of pathway lighting for the NC Bike Trail to ensure that the lighting will not negatively affect wildlife movement in the project area. Caltrans will review the permanent lighting plans and then submit them to the CFWO for review and approval.		Design Engineer / Biologist	Design					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environmental Compliance
a manner that will encourage users to remain on the trails and paths. In areas where wildlife movement is expected, such as along river and lagoon bridge benches, fencing will be designed in a manner that will encourage users to remain on the trails and paths but which will not preclude wildlife from moving through habitat areas and accessing pedestrian benches during flood events (e.g., [three rail] spilt rail fencing). Signage will be posted and maintained at conspicuous locations to inform users about adjacent sensitive habitats and species as well as access restrictions. Plans for fencing and signage for each phase of project construction will be submitted to the CFWO for approval at least 5 days prior to initiating project impacts in each phase. Fencing and signage will be installed prior to	and Appendix O	Biologist			Initial Date		Initial Date
completion of each phase of project construction. BO9. The following wildlife connectivity features will be constructed to ensure that ecosystem functions are maintained for the benefit of listed species: a. At Carmel Creek, a 10-foot-wide bench will be constructed at the south bridge abutment, and the existing 8-foot-wide bench at the north bridge abutment will be maintained. The south bench will be modified to allow for usage by pedestrians and bikes and is expected to provide for wildlife usage at night and during flood events. The project will elevate the Sorrento Valley Road Bike Path Connector to the west of the bridge and remove sediment under and southwest of the bike path to remove an existing constraint to flood flows and to improve wildlife connectivity from east to west. b. At the proposed bridge over Los Peñasquitos and Soledad Creeks, the existing bridge provides for a substantial dry movement area with a 2:1 slope to the north, which will be maintained. A new 16-foot-wide bench may be added at the south bridge abutment for both pedestrians and wildlife depending upon clearance. c. At San Dieguito Lagoon, the existing bridge provides for a substantial dry movement area to the south, and an existing 12-foot-wide pedestrian pathway will be maintained to the north that is expected to provide for wildlife movement at night and during flood events.	Section 3.17.3 and Appendix O	Design Engineer / Biologist / Biological Monitor	Design / Construction / Post- construction				



Task and	Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Compl	
						Initial Date		Initial	Date
	Existing pier walls constrain visibility and openness under the bridge. If possible, Caltrans will cut openings in existing and proposed pier walls to improve visibility and openness. The								
	south bank of the channel will not be armored.								
	At San Elijo Lagoon, a 12-foot-wide wildlife bench will be constructed to the south, and existing pedestrian pathways to the north and south will be maintained and are expected to provide for wildlife movement at night and during flood events.								
e.	At Batiquitos Lagoon, a 16-foot-wide wildlife bench will be constructed on the south bridge abutment and a 16-foot wide pedestrian path will be maintained on the north bridge abutment that is expected to provide for wildlife movement at night and during flood events.								
f.	At Agua Hedionda Lagoon, 16-foot-wide benches for pedestrian and wildlife use will be constructed at both the north and south bridge abutments.								
	At Buena Vista Lagoon, 16-foot-wide benches for wildlife movement will be constructed at both the north and south bridge abutments.								
	At the San Luis Rey River, a pedestrian trail will be constructed mid-slope on the north bridge abutment that is expected to provide for wildlife movement at night and during flood events.								
i.	Bridges where wildlife movement is expected will use columns rather than pier walls to improve visibility and openness and encourage usage by wildlife, including Carmel Creek, Los Peñasquitos and Soledad Creeks, and all lagoons (with the exception of San Dieguito Lagoon and the San Luis Rey River where pier walls may be required for stability).								
j.	To the maximum extent feasible, rock slope protection will be avoided at wildlife benches. If rock slope protection is required, modifications (e.g., small pebble, dirt, soil covered rip rap, or grouted movement pathways) will be made such that animals of all sizes can use the wildlife benches.								
k.	Monitoring will be conducted on the effectiveness of the wildlife connectivity features such that the effectiveness of wildlife connectivity features can be improved and to								



		Branch / Staff	Phase	Action Taken to Comply with Task	Task Completed	Remark	Compl	mental liance
					Initial Date		Initial	Date
inform decision-making for future projects. This monitoring will include research on the degree to which various undercrossings are used by target species. Remote cameras will be used to document use of wildlife undercrossings. Monitoring will be conducted over a minimum of 5 years following construction of each wildlife connectivity feature to allow wildlife to become accustomed to the wildlife connectivity features. Annual monitoring reports, including photographs, modifications made to wildlife connectivity features to improve their functionality, and recommendations, will be provided to the CFWO each year for the duration of the 5-year monitoring period following each phase of project construction. I. Wildlife benches will be maintained in perpetuity to ensure that wildlife connectivity in the project area is not lost over time. The wildlife connectivity plan will include a detailed explanation of how wildlife benches will be maintained and how the maintenance will be								
be used as a perch by raptors to prey upon listed	Section 3.17.3, Section 3.22.4 and Appendix O	Design Engineer / Landscape Architect / Biologist	Design / Pre-					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Comp	
					Initial Date		Initial	Date
be phased over approximately 21 years, Caltrans will conduct updated surveys for the gnatcatcher, rail, and manzanita within 1 year prior to the commencement of vegetation clearing and construction activities for each project phase to ensure that survey information remains up to date. FHWA and Caltrans acknowledge that Section 7 consultation will be reinitiated if survey results indicate that additional impacts to these species may occur beyond those addressed in this biological opinion.	and Appendix O		construction					
BO12. Caulerpa taxifolia surveys will be completed before and after construction at each of the lagoons to ensure there is no infestation within project limits. If Caulerpa taxifolia is found, measures will be implemented to eradicate it from the area.	Section 3.22.4 and Appendix O	Biologist	Pre- construction / Post- construction					
BO13. Prior to construction equipment entering open water habitat in the San Luis Rey River, all gobies within the project impact footprint will be captured and relocated to a proximal and safe location, and gobies will be excluded from re-entering the project impact footprint. Caltrans will submit a goby capture, relocation, and exclusion plan to the CFWO for review and approval. The plan will include relocation of native species and removal of nonnative species captured with gobies during the relocation effort. Capture methods will follow commonly accepted techniques for fish capture such as seining. The plan will be prepared and implementation will be overseen by a CFWO-approved biologist knowledgeable of goby biology and ecology.	Section 3.21.4 and Appendix O	Biologist	Pre- construction / Construction					
BO14. Prior to construction in areas with manzanita, all manzanita in the project impact footprint (including the approximately 6 individuals currently known and any other individuals found in updated surveys) will be salvaged and translocated to the Dean property, which is near the currently known salvage locations. Caltrans will submit a manzanita translocation plan to the CFWO for review and approval. The plan will be prepared and implementation will be overseen by a CFWO-approved biologist knowledgeable of manzanita biology and ecology and translocating sensitive plant species. There has been limited success with translocation of this species; therefore, seed will be collected prior to impacts and used to	Section 3.21.4 and Appendix O	Biologist	Pre- construction / Construction / Post- construction					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	• •	Task mpleted	Remark	Environ Compl	
				Initia			Initial	Date
propagate additional plants at a facility that has experience working with manzanita and specializes in the propagation of native plants. The manzanita plants grown from seed will also be planted at the Dean property. A field review will be conducted with the CFWO to review and approve the locations where the manzanita plants will be planted on the Dean property. The translocated manzanita population will be monitored for a minimum of 5 years to document success or failure of the								
BO15. The clearing and grubbing of native wetland and riparian habitats will occur between September 16 and March 14 and the clearing and grubbing of native upland habitats for the project will occur between September 1 and February 14, to avoid the rail and gnatcatcher breeding seasons, respectively [or sooner than September 16 or September 1, if a biologist knowledgeable of gnatcatcher and rail biology and ecology approved by the CFWO demonstrates to the satisfaction of the CFWO that all rail or gnatcatcher nesting is complete]. Caltrans will submit the biologist's name, address, telephone number, and work schedule on the project to the CFWO at least 5 working days prior to initiating project impacts.	Section 3.21.4 and Appendix O	Biologist / Resident Engineer / Biological Monitor	Pre- construction / Construction					
BO16. Pile driving for bridge construction near the lagoons and San Luis Rey River will be completed between September 16 and February 14 to minimize construction noise impacts to rail and gnatcatcher breeding. Pile driving may commence earlier in the fall if a biologist knowledgeable of gnatcatcher and rail biology and ecology approved by the CFWO demonstrates to the satisfaction of the CFWO that all rail and gnatcatcher breeding is complete within the area where construction noise will exceed ambient levels as a result of pile driving. Caltrans will submit the biologist's name, address, telephone number, and work schedule on the project to the CFWO at least 5 working days prior to initiating project impacts.	Section 3.21.4 and Appendix O	Biologist / Resident Engineer / Biological Monitor	Pre- construction / Construction					
BO17. Noise barriers will be installed at the edge of temporary impact areas near sensitive resources where feasible depending on inundation and effective heights required for walls. Noise walls would not be effective where fill slopes are	Section 3.21.4 and Appendix O	Design Engineer / Biologist / Resident Engineer	Design / Construction					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Compl	
				In	itial Date		Initial	Date
significantly higher than impact areas.								
BO18. All construction equipment used for the project will be equipped with properly operating and maintained mufflers.	Section 3.21.4 and Appendix O	Resident Engineer	Construction					
BO19. During in-water bridge construction activities at all lagoons and the San Luis Rey River, bubble curtains or other methods to minimize acoustical impacts to aquatic species will be implemented. These measures will be developed in coordination with the CFWO when project design and construction methodology is further developed.	Section 3.21.4 and Appendix O	Design Engineer / Biologist / Resident Engineer	Design / Construction					
BO20. If nighttime construction is necessary, all lighting used at night for project construction (e.g., staging areas, equipment storage sites, roadway) will be selectively placed and directed onto the roadway or construction site and away from sensitive habitats. Light glare shields will be used to reduce the extent of illumination into sensitive habitats.	Section 3.21.4 and Appendix O	Biologist / Resident Engineer / Biological Monitor	Design / Construction					
BO21. Appropriate best management practices (BMPs) will be used to control erosion and sedimentation and to capture debris and contaminants from bridge demolition and construction to prevent their deposition in coastal lagoons and waterways. No sediment or debris will be allowed to enter lagoons, creeks, rivers, or other drainages. All debris from the demolition and construction of bridges will be contained so that it does not fall into channels. Appropriate BMPs will be used during construction to limit the spread of resuspended sediment and contain debris. These may include cofferdams, blasting mats, silt curtains, turbidity curtains and/or other barriers. Water within cofferdams will not be returned to the San Luis Rey River or lagoons until it is clear and clean. This may be accomplished through the use of desiltation tanks or other appropriate measures. Collected sediments will be removed from the site and disposed of properly. BMPs (e.g., gravel bags) will be used at the discharge point to avoid erosion.	Section 3.17.3 and Appendix O	Design Engineer / Resident Engineer	Design / Construction					
BO22. Erosion and sediment control devices used for the proposed project, including fiber rolls and bonded fiber matrix, will be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement hazard.	Section 3.20.4 and Appendix O	Design Engineer / Resident Engineer	Design / Construction					
BO23. All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities will	Section 3.17.3 and Appendix O	Design Engineer / Resident Engineer	Design / Construction					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Tas Comp		Remark	Environ Compl	
					Initial	Date		Initial	Date
be restricted to designated areas that are a minimum of 100 feet from drainages / lagoons and associated plant communities, to preclude adverse water quality impacts. Fuel cans and fueling of tools will not be allowed inside the drainages.									
BO24. Impacts from fugitive dust will be avoided and minimized through watering and other appropriate BMPs.	Section 3.17.3 and Appendix O	Resident Engineer	Construction						
BO25. Cationic polymers are attracted to the hemoglobin in fish gills and can cause suffocation at relatively low concentrations. Cationic polymers will not be used for dust control.	Section 3.20.4 and Appendix O	Design Engineer / Resident Engineer	Design / Construction						
BO26. Bioswales and detention basins will be placed to avoid impacts to wetlands (e.g., these features will not be located at the base of slope within lagoons).	Section 3.17.3 and Appendix O	Design Engineer / Biologist	Design						
BO27. The project site will be kept as clear of debris as possible. All food-related trash items will be enclosed in sealed containers and regularly removed from the site. All spoils and material disposal will be disposed of properly.	Section 3.17.3 and Appendix O	Resident Engineer	Construction						
BO28. If fill must be borrowed from or disposed of offsite, the construction contractor will identify any necessary borrow and disposal sites and provide this information to Caltrans for review. Caltrans will review borrow and disposal site information and submit the information to the CFWO. If borrow or disposal activities may affect a listed species or critical habitat, FHWA/Caltrans will reinitiate Section 7 consultation. ⁵	Section 3.17.3 and Appendix O	Design Engineer / Biologist / Project Management / Resident Engineer	Construction						
Under the current process, FHWA would reinitiate formal consultation and Caltrans (acting for FHWA) would reinitiate informal consultation.									
BO29. Contractors and construction personnel will strictly limit their activities, vehicles, equipment, and construction materials to the fenced project footprint.	Section 3.17.3 and Appendix O	Resident Engineer	Construction						
BO30. Project personnel will be prohibited from bringing domestic pets to construction sites to ensure that domestic pets do not disturb or depredate wildlife in adjacent habitats.	Section 3.20.4 and Appendix O	Resident Engineer	Construction						
BO31. A CFWO-approved biologist (Biological Monitor ⁶) will be on site during: a) initial clearing and grubbing; and b) weekly during project construction within 500 feet of offsite gnatcatcher, rail, goby, and manzanita habitat to ensure compliance with all conservation measures. Caltrans will submit the biologist's name, address, telephone number, and	Section 3.21.4 and Appendix O	Biologist / Resident Engineer / Biological Monitor	Pre- construction / Construction						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Compl	
					Initial Date		Initial	Date
work schedule on the project to the CFWO at least								
5 working days prior to initiating project impacts.								
The contract of the Biological Monitor will allow								
direct communication with the CFWO at any time								
regarding the proposed project. The Biological								
Monitor will be provided with a copy of this								
consultation. The Biological Monitor and a Caltrans								
Project Biologist ⁷ will be available during pre-								
construction and construction phases to review								
grading plans, address protection of sensitive								
biological resources, monitor ongoing work, and								
maintain communications with the Resident								
Engineer to ensure that issues relating to biological								
resources are appropriately and lawfully managed.								
The Biological Monitor will perform the following duties:								
a. Perform a minimum of three focused								
preconstruction surveys, on separate days, to								
determine the presence of gnatcatchers or rails								
in the project impact footprint. Surveys will								
begin a maximum of 30 days prior to performing								
vegetation clearing / grubbing, and one survey								
will be conducted the day immediately prior to								
the initiation of vegetation clearing. If any								
gnatcatchers or rails are found in the project								
impact footprint, the Biological Monitor will direct								
construction personnel to begin vegetation								
clearing / grubbing in an area away from the								
gnatcatchers and/or rails. It will be the								
responsibility of the Biological Monitor to ensure								
that gnatcatchers and rails will not be injured or								
killed by vegetation clearing / grubbing. The								
Biological Monitor will also record the number								
and location of gnatcatchers and rails disturbed								
by vegetation clearing / grubbing. Caltrans will								
notify the CFWO at least 7 days prior to								
vegetation clearing / grubbing to allow the								
CFWO to coordinate with the Caltrans Project								
Biologist on potential bird flushing activities;								
b. Oversee installation of and inspect the								
construction fencing and erosion control								
measures a minimum of once per week to								
ensure that any breaks in the fencing or erosion								
control measures are repaired immediately and								
that rails have not entered the project impact								
footprint; c. Implement the goby capture, relocation and								
c. Implement the goby capture, relocation and								



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta: Comp		Remark	Environ Compl	
					Initial	Date		Initial	Date
exclusion plan; and manzanita translocation plan; d. Periodically monitor the work area to ensure that									
work activities do not generate excessive									
amounts of dust;									
e. Train all contractors and construction personnel									
on the biological resources associated with the project and ensure that training is implemented									
by construction personnel. At a minimum,									
training will include: 1) the purpose for resource									
protection; 2) a description of the gnatcatcher,									
rail, goby, and manzanita and their habitats;									
3) the conservation measures that should be									
implemented during project construction to									
conserve the gnatcatcher, rail, goby, and									
manzanita, including strictly limiting activities,									
vehicles, equipment, and construction materials									
to the fenced project footprint to avoid sensitive									
resource areas in the field (i.e., avoided areas									
delineated on maps or on the project site by									
fencing); 4) environmentally responsible construction practices; 5) the protocol to resolve									
conflicts that may arise at any time during the									
construction process; and 6) the general									
provisions of the Act, the need to adhere to the									
provisions of the Act, and the penalties									
associated with violating the Act;									
f. Request that the Resident Engineer halt work, if									
necessary, and confer with the Caltrans Project									
Biologist and the CFWO to ensure the proper									
implementation of species and habitat protection									
measures. The Caltrans Project Biologist will									
report any noncompliance issue to the CFWO									
within 24 hours of its occurrence;									
g. Monitor the project site immediately prior to and									
during construction to identify the presence of invasive weeds and recommend measures to									
avoid their inadvertent spread in association with									
the project. Such measures may include									
inspection and cleaning of construction									
equipment and use of eradication strategies. All									
heavy equipment will be washed and cleaned of									
debris prior to entering a lagoon area to									
minimize the spread of invasive weeds;									
h. Submit monthly email reports (including									
photographs of impact areas) to the Caltrans									
Project Biologist during clearing of, and									



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Compl	
					Initial Date		Initial	Date
construction within, 500 feet of gnatcatcher, rail,								
goby, and manzanita habitats. The monthly								
reports will document that authorized impacts								
were not exceeded and general compliance with								
all conditions. The reports will also outline the								
location of construction activities, the type of								
construction that occurred, and equipment used.								
These reports will specify numbers, locations,								
and sex of gnatcatchers, rails, and gobies (if								
observed), their observed behavior (especially in								
relation to construction activities), and remedial								
measures employed to avoid and minimize								
impacts to these species. The Caltrans Project								
Biologist will review reports and forward them to								
the CFWO. Raw field notes should be available								
upon request by the CFWO; and								
i. Submit a final report to Caltrans Project Biologist								
within 120 days of the completion of construction								
for each project phase that includes:								
photographs of habitat areas that were to be								
avoided and other relevant summary information								
documenting that authorized impacts were not								
exceeded and that general compliance with all								
conservation measures was achieved. As-built								
construction drawings with an overlay of habitat								
that was impacted and avoided will be provided								
as well once they have been completed. The								
Caltrans Project Biologist will review the report								
and forward it to the CFWO.								
⁶ The Biological Monitor will be familiar with the federally listed species								
potentially affected by the project (i.e., gnatcatcher, rail, goby and								
manzanita) and with the habitats that support these species. ⁷ The Caltrans Project Biologist will be a Caltrans biologist familiar								
with the federally listed species potentially affected by the project								
and with the habitats that support these species; he/she will be the								
primary contact for the CFWO during project implementation.								
BO32. All native or sensitive habitats outside and adjacent								
to the permanent and temporary construction limits								
will be designated as Environmentally Sensitive								
Areas (ESAs) on project maps. ESAs will be		Design Engineer /						
temporarily fenced during construction with orange	Section 3.21.4,	Biologist / Resident	Design / Pre-					
plastic snow fence, orange silt fencing, or in areas of	Section 3.17.3	Engineer / Biological	construction /					
flowing water, with stakes and flagging. No	and Appendix O	Monitor	Construction					
personnel, equipment or debris will be allowed within								
the ESAs. Fencing and flagging will be installed in a								
manner that does not impact habitats to be avoided								
and such that it is clearly visible to personnel on foot								



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta: Comp		Remark	Environ Compl	
					Initial	Date		Initial	Date
and operating heavy equipment. At the bridge construction areas where there is the potential for rail movement under the bridges, fencing will be installed in a manner that will direct rails to the open channel under bridges to the extent feasible. Caltrans will submit to the CFWO for approval, at least 5 days prior to initiating project impacts (except for impacts resulting from clearing to install temporary fencing), the final plans for initial clearing and grubbing of habitat and project construction. These final plans will include photographs that show the fenced and flagged limits of impact and all areas to be impacted or avoided. If work occurs beyond the fenced or demarcated limits of impact all work will cease until the problem has been remedied to the satisfaction of the CFWO. Temporary construction fencing and markers will be maintained in good repair until the					IIIIII	Date		IIIIIdi	Date
completion of each phase of project construction and removed upon completion of each project phase.									
BO33. During project construction all invasive species included on National Invasive Species Management Plan, the State of California Noxious Weed List, and the California Invasive Plant Council's (Cal-IPC) Invasive Plant Inventory list found growing within the project right-of-way will be removed. Weed removal will be conducted within the project right-of-way at least once per year during the construction period. Special care will be taken during transport, use, and disposal of soils containing invasive weed seeds and all weedy vegetation removed during construction will be properly disposed of to prevent spread into areas outside of the construction area.	Section 3.22.4, Section 3.17.3 and Appendix O	Resident Engineer / Biological Monitor	Construction						
BO34. A channel large enough for fish and rail movement will be kept open throughout project construction in the San Luis Rey River and each of the lagoons. Prior to initiation of construction in the San Luis Rey River and each of the lagoons, Caltrans will submit a plan to the CFWO for maintaining a channel for fish and/or rail movement in the San Luis Rey River and each of the lagoons.	Section 3.21.4 and Appendix O	Biologist / Resident Engineer	Pre- construction / Construction						
BO35. Permanent and temporary impacts to gnatcatchers, rails, gobies, manzanita, and critical habitat for the gnatcatcher and goby (as summarized in Tables 3 and 4 of the BO [Appendix O]) resulting from the I-5 North Coast Corridor Project will be offset through habitat creation restoration, and preservation /	Section 3.21.4 and Appendix O	Biologist / Project Manager	Design						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Enviror Comp	
					Initial Date		Initial	Date
enhancement as shown in Table 5 and Figures 22-31 of the BO (Appendix O). Implementation of these conservation measures is phased ahead of project impacts. In addition, large-scale lagoon restoration and lagoon management endowments shown in Table 5 of the BO (Appendix O) will be implemented to provide additional conservation to offset impacts from the I-5 North Coast Corridor Project, Los Angeles to San Diego Rail Corridor, and I-5 / State Route-78 Interchange Project (with project elements as listed in the REMP).								
BO36. Caltrans will submit draft San Dieguito Lagoon W19, Hallmark, Dean, San Elijo Uplands, Deer Canyon, Laser, and La Costa wetland and upland creation / restoration / enhancement plans to the CFWO for review and approval prior to initiating project impacts. Caltrans will provide the final plans to the CFWO. The final plans will include the following information and conditions: a. All final specifications and topographic-based grading, planting and irrigation plans (0.5-foot contours and typical cross-sections for wetlands and 10-foot contours for uplands) for the creation / restoration / enhancement sites. All wetland mitigation areas will be graded to the same elevation as adjacent existing Corps jurisdictional wetlands areas, and/or to within 1-foot of the groundwater table, and will be left in a rough grade state with micro topographic relief (including channels for wetlands) that mimics natural topography. All upland habitat creation / restoration / enhancement sites will be prepared for planting by decompacting the top soil in a way that mimics natural upland habitat top soil to the maximum extent practicable while maintaining slope stability. Topsoil and plant materials salvaged from the impacted areas (including live herbaceous, shrub and tree species) will be transplanted to, and/or used as a seed / cutting source for, the creation and enhancement areas to the maximum extent practicable. Planting and irrigation will not be installed until the CFWO has approved of the site grading. All plantings will be installed in a way that mimics natural plant distribution and not in rows. b. Planting palettes (plant species, size and	Section 3.17.3 and Appendix O	Biologist	Design / Construction / Post- construction					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task		sk oleted	Remark	Environmenta Compliance
					Initial	Date		Initial Dat
number/acre) and seed mix (plant species and								
pounds/acre). The multitude of plant palettes								
proposed in the draft plans will include native								
species specifically associated with the habitat								
type(s). Unless otherwise approved by the								
CFWO, only locally native species (no cultivars)								
obtained within San Diego County available from								
as close to the project area as possible will be								
used. The source and proof of local nativeness								
of all plant material and seed will be provided.								
c. Container plant survival will be 80 percent of the								
initial plantings for the first 5 years. At the first								
and second anniversary of plant installation, all								
dead plants will be replaced unless their function								
has been replaced by natural recruitment.								
d. A final implementation schedule that indicates								
when all native habitat impacts, as well as native								
habitat creation / restoration / enhancement								
grading, planting and irrigation will begin and								
end. Necessary site preparation and planting								
will be completed during the concurrent or next								
planting season (i.e., late fall to early spring)								
after receiving the CFWO's approval of grading.								
e. Five years of success criteria for creation /								
restoration / enhancement areas including:								
separate percent cover criteria for herbaceous								
understory, shrub midstory, and tree overstory,								
and a total percent absolute cover for all three								
layers at the end of 5 years for wetlands, and a								
total percent absolute cover for uplands;								
evidence of natural recruitment of multiple								
species for all habitat types; 0 percent coverage								
will be maintained for Cal-IPC's "Invasive Plant								
Inventory" species, and no more than 10 percent								
coverage for other exotic / weed species.								
f. A minimum 5 years of maintenance and								
monitoring of creation / restoration /								
enhancement areas, unless success criteria are								
met earlier and all artificial water supplies have								
been off for at least 2 years.								
g. A qualitative and quantitative vegetation								
monitoring plan with a map of proposed sampling locations. Photo points will be used for								
qualitative monitoring and stratified random								
sampling will be used for all quantitative monitoring.								
h. Contingency measures in the event of creation /								
n. Contingency measures in the event of creation /	<u> </u>			1		1		



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task		isk oleted	Remark	Environmental Compliance
					Initial	Date		Initial Date
restoration / enhancement failure. i. Annual mitigation maintenance and monitoring reports will be submitted to the CFWO no later than December 1 of each year. j. If maintenance of a wetland creation / restoration / enhancement area potentially occupied by rails is necessary between March 15 and September 15, a biologist with knowledge of rail biology and ecology and approved by the CFWO will survey for rails within the creation / restoration / enhancement area, access paths to it, and other areas susceptible to disturbances by creation / restoration / enhancement site maintenance. Surveys will consist of three visits separated by 2 weeks starting April 1 of each maintenance/monitoring year. Restoration work will be allowed to continue on the site during the survey period. However, if rails are found during any of the visits, the applicant will notify and coordinate with the CFWO to identify measures to avoid and/or minimize effects to the rail (e.g., nests and an appropriate buffer will be flagged by the biologist and avoided by the maintenance work). k. If maintenance of a coastal sage scrub restoration / enhancement area is necessary between February 15 and August 31, a biologist with knowledge of the biology and ecology of gnatcatchers and approved by the CFWO will survey for gnatcatchers within the creation /	Reference		_		Com	oleted	Remark	Compliance
restoration / enhancement area, access paths to it, and other areas susceptible to disturbances by site maintenance. Surveys will consist of three visits separated by 2 weeks starting March 1 of each maintenance/monitoring year. Work will be allowed to continue on the site during the								
survey period. However, if gnatcatchers are found during any of the visits, Caltrans will notify and coordinate with the CFWO to identify measures to avoid and/or minimize effects to the gnatcatcher (e.g., nests and an appropriate buffer will be flagged by the biologist and avoided by the maintenance work).								
BO37. Perpetual biological conservation easements or other conservation mechanisms acceptable to the CFWO will be recorded over the areas created,	Section 3.17.3 and Appendix O	Biologist / Project Management	Pre- construction / Post-					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Compl	
					Initial Date		Initial	Date
restored, and/or preserved / enhanced by the project at the San Dieguito Lagoon W19, Hallmark, Dean, San Elijo Uplands, Deer Canyon, Laser, and La Costa properties. The conservation mechanisms will specify that no easements or activities (e.g., fuel modification zones, public trails, drainage facilities, walls, maintenance access roads, utility easements) that will result in soil disturbance and/or native vegetation removal will be allowed within the biological conservation easement areas, with exceptions as documented in the Constraints			construction		Initial Date		IIIIII	Date
sections of Mitigation Site Assessments for these properties and where the acreage of impacts is not included in the mitigation acreage totals in Table 5 of the BO (Appendix O). Draft Mitigation Site Assessments have been provided to the CFWO for our review and comment. A copy of final Mitigation Site Assessments will be provided to the CFWO that clearly document constraints and demonstrate compliance with the requirement that the acreage of impacts resulting from constraints is not included in								
the mitigation acreage totals in Table 5 of the BO (Appendix O). Revised draft conservation mechanisms will be provided to the CFWO for review and approval. Caltrans will also submit the final conservation mechanisms to the CFWO. Caltrans anticipates that they will not be able to place the conservation easements or other conservation mechanisms for these properties prior to initiating project impacts; however, annual reports will be provided on their status until the conservation								
mechanisms are recorded over the properties, which will occur either within 1-year of the issuance of this biological opinion, or within 1-year of purchase of each property, unless a written extension is requested by Caltrans showing good faith efforts to achieve the recordation and the extension request is granted by the CFWO.								
BO38. Caltrans will prepare and implement perpetual management, maintenance, and monitoring plans for the San Dieguito Lagoon W19, Hallmark, Dean, San Elijo Uplands, Deer Canyon, Laser, and La Costa properties. Caltrans will also establish non-wasting endowments for amounts approved by the CFWO based on Property Analysis Records (PAR) (Center for Natural Lands Management ©1998) or similar cost estimation methods, to secure the ongoing funding for	Section 3.17.3 and Appendix O	Biologist / Project Management	Pre- construction / Post- construction					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Enviror Comp	
					Initial Date		Initial	Date
the perpetual management, maintenance and monitoring of these properties. Caltrans will submit draft long-term management plans for the properties to the CFWO for review and approval. The long-term management plans will include, but not be limited to, the following: 1) the PAR or other cost estimation results for the non-wasting endowment; 2) proposed land manager's name, qualifications, business address, and contact information; 3) method of protecting the resources in perpetuity (e.g., conservation easement), monitoring schedule, measures to prevent human and exotic species encroachment, funding mechanism, and contingency measures should problems occur. Caltrans will submit the final long-term management plans to the CFWO. Caltrans anticipates that the long-term management plans will not be prepared prior to initiating project impacts; however, annual reports will be provided on their status until the final management plans have been provided and the endowments have been established, which is anticipated to occur when the projects are projected to meet criteria (as					Initial Date		initial	Date
documented in Table 5 of the BO [Appendix O]) and will occur within 1 year of achieving applicable success criteria for each property. BO39. Caltrans will establish a non-wasting endowment for an amount approved by the CFWO, based on reliable and current estimates of maintenance costs, for long-term maintenance of Batiquitos and Los Peñasquitos Lagoons, including lagoon inlet maintenance and dredging. Caltrans will submit the estimates and information to demonstrate that the endowment will be non-wasting, and will adequately cover the costs of maintenance, to the CFWO for review and approval. Caltrans will make the endowment available for use within 1 year of establishment of the endowment, which will be established no later than December 1, 2015. Any delay in availability of funds will be reviewed and	Section 3.17.3 and Appendix O	Project Management	Pre- construction / Post- construction					
approved by the CFWO. BO40. Caltrans will fund, in full, a large-scale salt water lagoon restoration at San Elijo Lagoon and/or Buena Vista Lagoon through the REMP ⁸ . Caltrans will submit revised drafts of the REMP to the CFWO for review and comment. Large-scale lagoon restoration funding will be used solely for salt water lagoon restoration, which will restore tidally-	Section 3.21.4 and Appendix O	Biologist / Project Management	Design / Pre- construction / Post- construction					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Compl	
					Initial Date		Initial	Date
influenced habitats that are comparable with project impacts, for the benefit of listed species. Allocation of funding for large-scale salt water lagoon restoration will be determined, in coordination with the CFWO, prior to initiating project impacts. Caltrans will submit a copy of the final REMP and funding proposal to the CFWO for review and approval. 8 A separate section 7 consultation with the Federal lead agency for								
the restoration project will be required to address impacts to listed species resulting from large-scale lagoon restoration.								
BO41. Caltrans will establish non-wasting endowments for amounts approved by the CFWO, based on reliable and current estimates of maintenance costs, for long-term maintenance of the large-scale lagoon restoration at San Elijo Lagoon and/or Buena Vista Lagoon. Caltrans will submit the endowment estimates to the CFWO for review and approval. The endowments are anticipated to be established during the year in which the large-scale lagoon restoration work is completed and no later than December 1, 2019 unless a written extension is requested by Caltrans showing good faith efforts to establish the endowment and the extension request is granted by the CFWO. Funds will be available for use within one year of establishment of the endowments.	Section 3.17.3 and Appendix O	Biologist / Project Management	Construction / Post- construction					
BO42. All areas of temporary impact, as quantified in Table 2 of the BO (Appendix O), will be revegetated and restored with native species. These areas will be returned to original grade, as feasible. Prior to initiating project impacts, a restoration plan will be developed for the temporary impact areas. The plan will be submitted to the CFWO for review and approval. This plan will include a detailed description of restoration methods, slope stabilization, and erosion control, criteria for restoration to be considered successful, and monitoring protocol(s). Following the completion of construction activities within each area of impact, the restoration plan will be implemented for a minimum of 5 years, unless success criteria are met earlier and all artificial water has been off for at least 2 years. Temporary impact areas will be planted as soon as possible following re-grading after completion of construction to prevent encroachment by nonnative plants.	Section 3.17.3 and Appendix O	Design Engineer / Biologist / Landscape Architect / Resident Engineer /	Design / Construction / Post- construction					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Ta Comp		Remark	Environ Compl	
					Initial	Date		Initial	Date
BO43. Cut and fill slopes adjacent to native habitats will be revegetated with native habitats with similar composition to those within the project study area as feasible, including over 86 acres of slopes near lagoons and other open space that will be revegetated with coastal sage scrub. Duff and rare plants from areas with coastal sage scrub, maritime succulent scrub, and maritime chaparral may be salvaged from the project impact footprint to the extent practicable to aid in revegetating slopes with native habitats (excluding areas with invasive nonnative species such as African veldt grass and onion weed). The revegetated areas will have temporary irrigation and will be planted with native container plants and seeds selected in coordination with the Caltrans Project Biologist. At least 3 years of plant establishment/maintenance on these slopes will be conducted to control nonnative plants. Bioswales and detention basins will be planted with appropriate species as determined in coordination with the Caltrans Project Biologist and storm water pollution prevention professional. These areas will be planted as soon as possible following completed construction to prevent encroachment by nonnative plants. Slopes and interchanges located adjacent to developed urban areas will be planted with native and drought tolerant non-invasive species selected by the biologist and landscape architect.	Section 3.17.3 and Appendix O	Design Engineer / Biologist / Landscape Architect / Resident Engineer / Biological Monitor	Design / Construction / Post- construction						
Caltrans will implement significant conservation measures as part of the proposed action to minimize the incidental take of gnatcatchers, rails, and gobies. In addition to these conservation measures, the following reasonable and prudent measures are necessary to monitor and report the effects of the incidental take on gnatcatchers, rails, and gobies: 1. FHWA and/or Caltrans will monitor and report on compliance with the established take exemptions for gnatcatchers associated with the proposed action. 2. FHWA and/or Caltrans will monitor and report on compliance with the established take exemptions for rails associated with the proposed action. 3. FHWA and/or Caltrans will monitor and report on compliance with the established take exemptions for gobies associated with the proposed action.	Appendix O	Biologist / Resident Engineer / Biological Monitor	Construction						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Enviror Comp	
					Initial Date		Initial	Date
 Coastal California Gnatcatcher 1.1 Prior to initiating each phase of the proposed project, three preconstruction surveys will be conducted within all suitable gnatcatcher habitat within the footprint for that phase of the project, within 30 days prior to initiation of vegetation removal activities, to verify that no more than 6 gnatcatcher pairs in phase 1, 8 gnatcatcher pairs in phase 2, and 1 gnatcatcher pair in phase 3 (unless bridge construction is moved forward in project phasing to avoid impacts to coastal wetlands in which case take of 4 pairs of gnatcatchers would be advanced from phase 2 to phase 1), with 15 pairs in total, will be taken as a result of the project. Prior to initiating each phase of the project, FHWA and/or Caltrans will provide to the CFWO a map showing the distribution of gnatcatchers relative to the project footprint for that phase, an estimate of the number of gnatcatchers territories that will be impacted by the project in that phase, and the cumulative total of gnatcatcher territories impacted by the project to date, or confirm in writing that maps, distribution information, and the number of territories that will be impacted by the project as shown in the BA remain correct. 1.2 FHWA and/or Caltrans will notify the CFWO within 30 days of completing removal of gnatcatcher occupied habitat in each project phase. The purpose of this notification is to ensure that impacts to gnatcatcher-occupied habitat from the proposed project do not exceed the take exemptions. 	Appendix O	Biologist / Resident Engineer / Biological Monitor	Pre-construction / Construction					
Light-footed Clapper Rail 2.1 Prior to initiating each phase of the proposed project, three preconstruction surveys will be conducted within all suitable rail habitat within the footprint for that phase of the project, within 30 days prior to initiation of vegetation removal activities, to verify that no more than one pair in phase 1, two pairs in phase 2, and one pair in phase 3 (unless bridge construction is moved forward in project phasing to avoid impacts to coastal wetlands in which case take of all four pairs of rails would occur in phase 1), with four pairs in total, will be taken as a result of the project. Prior to initiating each phase of the project, FHWA and/or Caltrans will provide to the CFWO a map showing the distribution of rails relative to the project footprint for that phase, an	Appendix O	Biologist / Resident Engineer / Biological Monitor	Pre- construction / Construction					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed		Remark	Environme Complian	
					Initial	Date		Initial D	Date
estimate of the number of rail territories that will be impacted by the project in that phase, and the cumulative total of rail territories impacted by the project to date, or confirm in writing that maps, distribution information, and the number of territories that will be impacted by the project as shown in the BA remain correct. 2.2 FHWA and/or Caltrans will notify the CFWO within 30 days of completing removal of rail occupied habitat in each project phase. The purpose of this notification is to ensure that impacts to rail-occupied habitat from the proposed project do not exceed the take thresholds.									
Tidewater Goby									
3.1 Within 30 calendar days of the completion of project activities within goby habitat, FHWA and/or Caltrans will provide the CFWO with a report documenting the area of goby habitat impacted, the number of dead or injured gobies observed in the action area, and the number of gobies captured and released. The report will include information on the general condition of all gobies that were killed, injured, and captured/released. It will also include an assessment of how or why gobies may have been injured or killed and information on where gobies were captured and released. Caltrans will report incidences of take (observed death or injury or capture and relocation of gobies) to the CFWO within 3 days. All field notes and other documentation generated by the biological monitor will be made available to the CFWO upon request. The purpose of this notification is to ensure that impacts to goby-occupied habitat from the proposed project do not exceed the take thresholds.	Appendix O	Biologist / Biological Monitor	Post- construction						
DISPOSITION OF SICK, INJURED, OR DEAD SPECIMENS Upon locating dead, injured, or sick individuals of threatened or endangered species, initial notification must be made to the Division of Law Enforcement in either San Diego, California, at 619-557-5063 or in Torrance, California, at 310-328-6307 within 3 working days. Notification should also be sent by telephone and writing to the office in Carlsbad, California, at 6010 Hidden Valley Road, Suite 101, Carlsbad, California 92011, 760-431-9440. Written notification must be made within 5 calendar days and include the collection date and time, the location of the animal, and any other pertinent information. Care	Appendix O	Biologist / Resident Engineer / Biological Monitor	Construction						



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task	Task Completed	Remark	Environ Compl	
					Initial Date		Initial	Date
must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. The remains of intact specimens shall be placed with educational or research institutions holding the appropriate State and Federal permits. Remains shall be placed with the San Diego Natural History Museum, San Diego. Arrangements regarding proper disposition of potential museum specimens shall be made with the								
institution by the authorized biologist prior to implementation of the action.								
Eelgrass surveys would be completed at all lagoons with the exception of Buena Vista prior to bridge construction. In lagoons where eelgrass is identified in proximity to I-5 improvements, eelgrass surveys would continue during and after construction, and mitigation would be implemented in accordance with the Resource Enhancement and Mitigation Program (REMP).	Section 3.17.3	Biologist / Resident Engineer / Biological Monitor	Pre- construction / Construction / Post- construction					
Impacts to native upland habitats would be mitigated on a corridor-wide basis through the proposed North Coast Corridor REMP.	Section 3.17.3	Biologist	Design					
Any seeding of native upland habitats would be completed between October and February to ensure that the seed has proper conditions for germination.	Section 3.17.3	Biologist / Biological Monitor	Construction					
Wetlands and Other Waters			<u>. </u>				·	
Bioswales/detention basins would be placed in the loop ramps, and bioswales would be placed on slopes (i.e., not at base of slope within lagoons), as appropriate to treat runoff from the freeway.	Section 3.18.4	Design Engineer	Design					
Sensitive Plant Species								
Seed would be collected or plants would be salvaged to the extent practicable in the impact areas as mitigation. Salvaged plants and seed would be planted in mitigation sites, on revegetated new slopes, or in revegetated areas that were temporarily impacted. The majority of these species could potentially be salvaged or mitigated by planting in an off-site preserve.	Section 3.19.4	Biologist / Biological Monitor	Construction					
Sensitive Animal Species	T		1				T	
Exclusion devices would be installed on bridge drain holes and ledges during the non-breeding season (September 1 through February 15) to stop swallows, swifts, and any other birds or bats from nesting on or within bridges to be demolished.	Section 3.20.4	Biologist / Resident Engineer	Construction					
In-water construction activities at the San Luis Rey River would take place outside of the steelhead migration window when steelhead adults and juveniles are expected to be using the lower reach of the San Luis Rey River.	Section 3.21.4	Biologist / Resident Engineer	Construction					



Task and Brief Description	Reference	Responsible Branch / Staff	Timing / Phase	Action Taken to Comply with Task		sk oleted	Remark	Enviror Comp	
					Initial	Date		Initial	Date
Silt curtains, coffer dams, and/or other barriers would be used to prevent steelhead from entering the construction zone and prevent sedimentation and debris from entering the river.	Section 3.21.4	Biologist / Resident Engineer	Construction						
Best management practices would be implemented during construction to minimize impacts on steelhead and aquatic habitat in the San Luis Rey River. These include sediment control measures to minimize erosion and impacts to water quality, measures to prevent debris and fresh concrete from entering the river channel, and fueling and maintenance of heavy machinery in areas away from the river channel and sensitive habitats.	Section 3.21.4	Biologist / Resident Engineer	Construction						
All removal of native vegetation or non-native shrubs and trees located within the impact areas would be completed outside of the bird breeding season (February 15 to August 31), if possible, to avoid impacts to nesting birds. Otherwise, a qualified biologist would thoroughly survey all vegetation prior to removal to ensure there are no nesting birds on site. If nesting birds are identified on site, vegetation removal would be delayed until the chicks have fledged or the nest has failed.	Section 3.17.3	Biologist / Resident Engineer	Construction						







Appendix E: Farmland Conversion Impact Rating Form



	TYPE	IMPACT RAT	ING			(Rive, 1-91)
	3. Date	of Land Evaluation	Request.	7/24/07	Sheet 1 of	1
	5. Feder	ral Agency Involved		4	aneer y to	
	Fed	leral Highway /	Adminis			
ct						
	1. Date 1	Request Received by 1/07	NRCS	C. Ca	n Completing Form	
oes the cerridor contain prime, unique statewide or local important lamiland? no, the FPPA does not apply: Do not complete additional parts of this form).				4. Acres 69,537	Irrigated Average 1	Farm Size
		overnment Jurisdiction 7 Amount of Fa				dired in FPPA
Acres: 112,	974	16	4	Acres	91,812	% 4
	Site Asso	sament System		10. Date l		
None		1			110-01-01	
						Corridor D
	-					1,604
Services		0	-		1,02.0	
		1,630		3	1,628	1,604
tion Information						
		551	551		558	547
			-		355	414
it To Be Converted		1	1		1	1
	Value	Data I	JOY	AV	ailable	2
formation Criterion R	loistive	-172	FI	76	- 174	51.81
	Bearing and Control	0	0		0	0
	10	5	5		5	5
	20	0	0		0	0
nt	20	20	20			20
			_	_		0
				-		5
			-	-		15
	_					0
	10		_			5
	160					50
		50	bu		50	50
				/-		
	100	51,73	51	70	51.74	51.81
al sits	160	50	50		50	50
	260	50 101.73	50' 1	01.76	50101,74	50101.8
Control of the Contro	Date Of S	Selection:	4. Was A	Local Site	e Assessment Used	17
04 40				VES [No. 🛛	
at at later date, t es, the local com	pased on munit	on a thorough a y, traffic, air/no	analysis ise, and	of all is others.	Sue areas, incl	uding
	al parts of this form) 6. Farmable Land Acres: 112, 9. Name of Local: None Services tion Information iit To Be Converted the Ornation Criterion of 0 - 100 Points) for CFR 658.5(c)) int al sits milands to be spect: 4. + at at later date, the se, the local contents to the spect.	In Bate 1. Bate 7/24 Important lamiland? 1. Bate 7/24 Important lamiland? 1. Bate 7/24 In parts of this form). 5. Farmable Land in Govern Acres: 112,974 9. Name of Local Site Asser None Services tion Information Maximum Points 15 10 20 15 10 20 11 10 25 5 20 25 10 160 100 al sits 160 100 al sits 160 260 milands to be 3. Date Of Site Community 160 at at later date, based of es, the local community	Ct 6. County and State San 1. Gate Request Received by 7/24/07 Important lamiland? I	Federal Highway Administration Federal Highway Administration	Federal Highway Administration Ct Country and State San Diego, CA 1. Date Request Hacking by NRCS 7. C. C. Important lamiland? In parts of this form). Seamable Land in Government Jurisdiction Acres: 112,974 9. Name of Local Site Assessment System None Alternative Corridor For S Corridor A Corridor B 1,630 1,616 Services 0 0 0 1,630 1,616 Services 10 0 1,616 Services 0 0 0 1,630 1,616 Services 1,630 1,616 Services 0 0 0 1,630 1,616 1,630	Federal Highway Administration E. Courty and State San Diego, CA I. Date Request Hacehoed by NRCS 2 Person Completing Form C. Calvert Acres important learning YES No 69,537 80 69,537 8



Appendix F: List of Acronyms



°F Degrees Fahrenheit

% Percent

μg/cm³ Micrograms per cubic meter

22nd DAA 22nd District Agricultural Association

ac Acre(s) ec-ft acre-feet

ADT Average Daily Traffic

AADT Average Annual Daily Traffic

AASHTO American Association of State Highway and Transportation

Officials

AB Assembly Bill

ACHP Advisory Council on Historic Preservation

ADA Americans With Disabilities Act

ADI Area of Direct Impact
ADL Aerially Deposited Lead
ADT Average Daily Traffic

AMA Archaeological Monitoring Area

AMSL Above mean sea level
APCD Air Pollution Control District
APE Area of Potential Effect
APS Advanced planning study

ASBS Areas of Special Biological Significance

ASML above mean sea level

AASHTO American Association of State Highway and Transportation

Officials

ASR Archaeological Survey Report

Basin Plan Regional Water Quality Control Board Basin Plan

BMP Best management practice

BNSF Burlington Northern and Santa Fe Railway

BO Biological Opinion
BRT Bus Rapid Transit
BSA Biological Study Area
BTU British thermal unit

CAA Clean Air Act

CAAA

CAAQS

CAIfornia Ambient Air Quality Standards

CAFE

Cal-IPC

Caltrans

California Invasive Plant Council

California Department of Transportation

California Environmental Protection Agency

CARB California Air Resources Board

CA SB California Senate Bill

CCAR California Climate Action Registry
CCC California Coastal Commission



CCTV Closed circuit television

CDC California Department of Conservation

CDFW California Department of Fish and Wildlife (previously

California Department of Fish and Game: CDFG)

CDP Coastal Development Permit
CEC California Energy Commission
CECP Carlsbad Energy Center Project
CEQ Council on Environmental Quality
CEQA California Environmental Quality Act

CER Cost Estimate Review

CERCLA Comprehensive Environmental Response Compensation

and Liability Act of 1980

CERFA Community Environmental Response Facilitation Act of 1992

CESA California Endangered Species Act

CFP California Fully Protected
CFR Code of Federal Regulations

cfs Cubic feet per second

CH₄ Methane

CHP California Highway Patrol

CHR church

CHRIS California Historical Resources Information System

CIA Community Impact Assessment
CIP Capital Improvements Program

CMIA Corridor Mobility Improvement Account

CMS Changeable Message sign or Cubic meter per second

CNDDB California Natural Diversity Database

CNPS California Native Plant Society

Coastal Act
"Coast Highway"

CO
Country Route S21
CO
Carbon Monoxide
CO₂
Carbon dioxide

CO-CAT Coastal Ocean Climate Action Team

CO Protocol Transportation Project-Level Carbon Monoxide Protocol,

1997

Construction General Permit State of California NPDES General Permit for Storm Water

Discharges Associated With Construction Activities

COZEEP Construction Zone Enhancement Enforcement Program

CP Control point

CRHR California Register of Historic Resources
CRHS California Register of Historic Sites
CSMP Corridor System Management Plan

CSS Coastal sage scrub
CT Census Tract

CTC California Transportation Commission

CVREP Carmel Valley Restoration and Enhancement Project

CWA Clean Water Act cubic yards

CZMA Coastal Zone Management Act of 1972



DAR Direct Access Ramp

dB Decibel(s)

dBA A-weighted decibel(s)

dBA L_{eq} A-weighted decibel(s) peak-noise-hour equivalent sound

level

DDD Dichloro Diphenyl Dichloroethane

DDE Dichloro Diphenyl Ethane

DDT Dichloro Diphenyl Trichloroethane
DEOG Diesel exhaust organic gases
DLA District Landscape Architect
DPM Diesel particulate matter
DPP Design Pollution Prevention

DPR Draft Project Report

DRIR Draft Relocation Impact Report

DSA Disturbed soil area

DTSC Department of Toxic Substances Control

du Dwelling unit

du/ac Dwelling units per acre

EB Eastbound

ECR Environmental Commitments Record

EDCO Escondido Disposal, Inc. EFH Essential Fish Habitat

EIR Environmental Impact Report
EIS Environmental Impact Statement
EMP Environmental Mitigation Program

EO Executive Order

ESA Environmentally Sensitive Area

ESHA Environmentally Sensitive Habitat Areas

Fairgrounds Del Mar Fairgrounds and Racetrack Facility

FCAA Federal Clean Air Act
FE Federal Endangered

FEMA Federal Emergency Management Agency

FESA Federal Endangered Species Act
FGC California Fish and Game Code
FHWA Federal Highway Administration

FIFRA Federal Insecticide, Fungicide, and Rodenticide Act

FMMP Farmland Mapping and Monitoring Program

FOE Finding of Effect

FP State of California Fully Protected Species

FPPA Farmland Protection Policy Act
FRA Federal Railroad Administration
FRIS Final Relocation Impact Study

f/s Feet per second

FSC Federal Species of Concern

FSTIP Federal Statewide Transportation Improvement Program

FT Federal Threatened



ft Foot or feet ft/s feet per second

FTA Federal Transit Administration

GHG Greenhouse gas

GIS Geographic Information System

GSF gross square feet

Guide Caltrans Storm Water Quality Handbook, Maintenance Staff

Guide

H₂S hydrogen sulfide HA Hydrologic areas

HCP Habitat Conservation Plan
HDM Caltrans Highway Design Manual

HEC-RAS Hydrologic Engineering Centers Rivers Analysis System

HEI Health Effects Institute

HFC fluoroform

HFC-134a s, s, s, 2-tetrafluoroethane

HFC-152a difluoroethane HFC Hydrofluorocarbons

HHS Health and Human Services

HM hotel or motel

HMP Habitat Management Plan or Hydromodification

Management Plan

HMMP Habitat Mitigation and Monitoring Plan

Horsepark
HOT
high occupancy toll
HOV
High Occupancy Vehicle

HPSR Historic Property Survey Report

Hr(s) hour(s)

HRER Historic Resources Evaluation Report

HSA Hydrologic subarea HU Hydrologic unit

I- Interstate

IAP Intermediate access points

I.L. Insertion loss in Inch(es)

IPCC Intergovernmental Panel on Climate Change

IRIS Integrated Risk Information System

ISTEA Intermodal Surface Transportation Efficiency Act

ITS Intelligent Transportation Systems

JPA Joint Powers Authority for San Dieguito River Valley

Regional Open Space Park



KCRC Kumeyaay Cultural Repatriation Committee

kV Kilovolts

LCP Local Coastal Program
LDV Light duty vehicle
LED Light-emitting diode

LEDPA Least Environmentally Damaging Practicable Alternative

Leq Equivalent Sound Level low impact development

LOS Level of Service

LOSSAN Los Angeles – San Luis Obispo – San Diego

LPA Locally Preferred Alternative

LRH Last Resort Housing LRT Light rail transit

LTMP Long-term Management Plan

LUP Land Use Plan

Ma Mega annum; million years ago

MAP-21 Moving Ahead for Progress in the 21st Century Act

MCAS Marine Corps Air Station
MEP Maximum Extent Practicable

MCB Marine Corps Base MF Mixed-flow lane

MFR multi-family residences mgd million gallons per day

MH mobile home

MHCP Multiple Habitat Conservation Program

MHHW mean higher high water
MHPA Multi-Habitat Planning Area

mi Mile(s) min minute

MIS Major Investment Study

ML Managed Lanes

MLD Most Likely Descendant
MLLW Mean Lower Low Water
MMT Million metric ton(s)

MOA Memorandum of Agreement MOU Memorandum of Understanding

mpg Miles per gallon mph Miles per hour

MPO Metropolitan Planning Organization
MS4 Municipal Separate Storm Sewer System

MSA Major Statistical Area and Mitigation Site Assessment

MSAT Mobile Source Air Toxics

MSCP Multiple Species Conservation Program

MSE Mechanically stabilized earth

MSL Maintenance Service Level or mean sea level

MTS Metropolitan Transit System



MW Megawatt

N₂O Nitrous oxide

NAAQS National Ambient Air Quality Standards

NAC Noise Abatement Criteria

NADR Noise Abatement Decision Report
NAHC Native American Heritage Commission
NATA National Air Toxics Assessment

NAVD 88 North American Vertical Datum of 1988

NB northbound NC North Coast

NCC North Coast Corridor

NCCP Natural Communities Conservation Planning

NCTD North County Transit District
NCTS North Coast Transportation Study
NEPA National Environmental Policy Act
NES Natural Environment Study

NESHAP National Emissions Standards for Hazardous Air Pollutants

NGVD National Geodetic Vertical Datum NHPA National Historic Preservation Act

NHSTA National Highway Traffic Safety Administration

NMFS National Marine Fisheries Service

NO₂ Nitrogen Dioxide

NOA Naturally Occurring Asbestos

NOAA National Oceanic and Atmospheric Administration

NOD Notice of Determination

NOI Notice of Intent

NOID notice of impending development

NOP Notice of Preparation NO_x Nitrogen oxides

NPDES National Pollutant Discharge Elimination System

NRCS Natural Resource Conservation Service
NRHP National Register of Historic Places

NSA Noise Sensitive Area
NWS National Weather Service

 O_3 Ozone

OC Overcrossing
OC/UC over/undercrossing

OH Overhead

OPR Governor's Office of Planning and Research

OSHA Occupational Safety and Health Act
OSTP Office of Science and Technology Policy
OUSD Oceanside Unified School District

P Pair

PA/ED Project Approval/ Environmental Document



PA Programmatic Agreement
PAR Property Analysis Records

Pb Lead

PDS Project Development Support PDT Project development team

PeMS Performance Measurement System(s)

PFCs Perfluorocarbons

PLAGUE Prevent Los Angeles Gridlock Usurping the Environment

PM Post Mile / particulate matter

PM₁₀ Particulate matter sized 10 microns and under PM_{2.5} Particulate matter sized 2.5 microns and under PMMP Paleontological Mitigation Monitoring Plan PMMR Paleontological Mitigation Monitoring Report

POC Pedestrian overcrossing POM Polycyclic organic matter

ppb parts per billion
ppm Parts per million
PRC Public Resources Code
PSR Project Study Report

PWP/TREP Public Works Plan / Transportation and Resource

Enhancement Program

RAP Relocation Assistance Program

RCP Regional Comprehensive Plan (for the San Diego Region)

RCRA Resource Conservation and Recovery Act of 1976

REC recreational area

REP Resource Enhancement Program

REMP Resource Enhancement and Mitigation Program

Resources Agency Natural Resources Agency (previously California Resources

Agency)

RIP Regional Improvement Program

ROG Reactive organic gases
ROD Record of Decision
RSAs Resource Study Areas

RTIP Regional Transportation Improvement Program

RTM Regional Transportation Model RTP Regional Transportation Plan

RWQCB Regional Water Quality Control Board

SAFETEA-LU Safe, Accountable, Flexible, Efficient Transportation Equity

Act – A Legacy for Users

SAIC Science Applications International Corporation

SANDAG San Diego Association of Governments

SB Senate Bill / southbound

SCC California State Coastal Conservancy

SCE Southern California Edison

SCH school

SCS Sustainable Community Strategies



SDAB San Diego Air Basin

SDAPCD San Diego Air Pollution Control District

SDC Seismic Design Criteria
SDEIR/SDEIS Supplemental Draft EIR/EIS
SDG&E San Diego Gas and Electric
SDNR San Diego Northern Railway
SDRP San Dieguito River Park

SDRVLC San Dieguito River Valley Land Conservancy

SDS Seismic Design Criteria SE State Endangered

SELRP San Elijo Lagoon Restoration Project

SF₆ Sulfur hexafluoride SFR single-family residence

SHPO State Historic Preservation Officer

SIP State Implementation Plan

SLR sea level rise SM Single Male

SMAQMD Sacramento Metropolitan Air Quality Management District

SO₂ Sulfur dioxide SO₄ sulfates

SOC Statement of Overriding Considerations SONGS San Onofre Nuclear Generating System

SOVsingle occupancy vehicleSPState of California ProtectedSprinterSprinter Community Rail

SR- State Route

SSC State Species of Special Concern

STIP State Transportation Improvement Program

SWDRStorm Water Data ReportSWMPStorm Water Management PlanSWPPPStorm Water Pollution Prevention PlanSWRCBState Water Resources Control Board

TDC Targeted Design Constituents

TDM Transportation Demand Management TIPs Transit Improvement Programs
TMDL Total Maximum Daily Load
TMP Traffic Management Plan
TOD Transit-oriented development
TSCA Toxic Substances Control Act

TSM Transportation Systems Management 22nd DDA 22nd District Agricultural Association

UC undercrossing

UCSD University of California San Diego

UP Union Pacific U.S. United States

USACE U.S. Army Corps of Engineers



USC United States Code

USDA U.S. Department of Agriculture

USDOT United States Department of Transportation
USEPA United States Environmental Protection Agency

USFWS United States Fish and Wildlife Service UVOL Unadjusted 24-hour Forecasted Volume

VA Veterans Administration
VHD Vehicle Hours of Delay
VIA Visual Impact Assessment
VMT Vehicle Miles Traveled
VOC Volatile organic compounds
vphpl Vehicle per hour per lane

WB Westbound

WDRs Waste Discharge Requirements

WM Waste Management, Inc.
WQR Water Quality Report
WUS Waters of the U.S.

YOE Year of Expenditure



Appendix G: CEQA Environmental Checklist



11-SD-5	R28.5/R55.4	235800
DistCoRte.	P.M/P.M.	E.A.

Supporting documentation of all CEQA checklist determinations is provided in Chapter 3 of this Environmental Impact Report/Environmental Impact Statement. Documentation of "No Impact" determinations is provided at the beginning of Chapter 3. Discussion of all impacts, avoidance, minimization, and/or compensation measures is under the appropriate topic headings in Chapter 3.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	\boxtimes			
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			\boxtimes	
II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			\boxtimes	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				



	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				\boxtimes
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				\boxtimes
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d) Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
e) Create objectionable odors affecting a substantial number of people?				
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		\boxtimes		



	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		\boxtimes		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		\boxtimes		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		\boxtimes		
d) Disturb any human remains, including those interred outside of formal cemeteries?		\boxtimes		
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				\boxtimes
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?				
ii) Strong seismic ground shaking?			\boxtimes	
iii) Seismic-related ground failure, including liquefaction?			\boxtimes	
iv) Landslides?			\boxtimes	
b) Result in substantial soil erosion or the loss of topsoil?				\boxtimes
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				\boxtimes



	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				\boxtimes	
VII. GREENHOUSE GAS EMISSIONS: Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	climate chang environmenta	ge is included i al document. V	Vhile Caltrans ha	as	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined the body of the environmental document.				
VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?					
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				\boxtimes	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?					
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?					
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?					
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				\boxtimes	
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?					



	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?			\boxtimes	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
f) Otherwise substantially degrade water quality?			\boxtimes	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				\boxtimes
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			\boxtimes	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
j) Inundation by seiche, tsunami, or mudflow				\boxtimes
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?				\boxtimes



	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				
XI. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				\boxtimes
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				\boxtimes
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?		\boxtimes		
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				\boxtimes
XIII. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses)				\boxtimes



	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
or indirectly (for example, through extension of roads or other infrastructure)?				
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\boxtimes
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				\boxtimes
XIV. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				\boxtimes
Police protection?				\boxtimes
Schools?				\boxtimes
Parks?				\boxtimes
Other public facilities?				\boxtimes
XV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				\boxtimes
XVI. TRANSPORTATION/TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel				



	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				\boxtimes
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				\boxtimes
e) Result in inadequate emergency access?				\boxtimes
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				\boxtimes
XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				\boxtimes
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				\boxtimes
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				\boxtimes
g) Comply with federal, state, and local statutes and regulations related to solid waste?				\boxtimes



	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			\boxtimes	